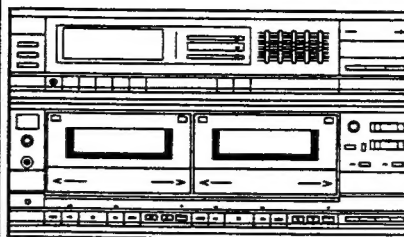


Service Manual



ORDER NO.
ARP1314

STEREO DOUBLE CASSETTE TAPE DECK AMPLIFIER

DC-X99Z

MODEL DC-X99Z COMES IN FOUR VERSIONS DISTINGUISHED AS FOLLOWS:

| Type | Power requirement | Export destination |
|------|---|--------------------|
| HE | AC220V, 240V (switchable) * | European continent |
| HB | AC220V, 240V (switchable) * | United Kingdom |
| SD | AC110V, 120-127V, 220V, 240V (switchable) | General market |
| HEZ | AC220V, 240V (switchable) * | West Germany |

* Change the primary wiring, please refer to page 44.

- This service manual is applicable to the HE, HB and SD types.
- As to the HB and SD types, please refer to pages 43-44.
- As to the HEZ type, please refer to the additional service manual (ARP1315).
- Ce manuel d'instruction se réfère au mode de réglage, en français.
- Este manual de servicio trata del método ajuste escrito en español.

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PIONEER ELECTRONIC CORPORATION 4-1, Meguro 1-Chome, Meguro-ku, Tokyo 153, Japan
PIONEER ELECTRONICS SERVICE INC. P.O. Box 1760, Long Beach, California 90801 U.S.A. TEL: [213] 835-6177
PIONEER ELECTRONICS OF CANADA, INC. 505 Cochrane Drive, Markham, Ontario L3R 6B8 Canada TEL: [416] 479-4411
PIONEER ELECTRONIC [EUROPE] N.V. Keetberglaan 1, 2740 Beveren, Belgium TEL: 03/775-28-08
PIONEER ELECTRONICS AUSTRALIA PTY. LTD. 178-184 Boundary Road, Braeside, Victoria 3195, Australia TEL: [03] 580-9911

1. EXPLODED VIEW

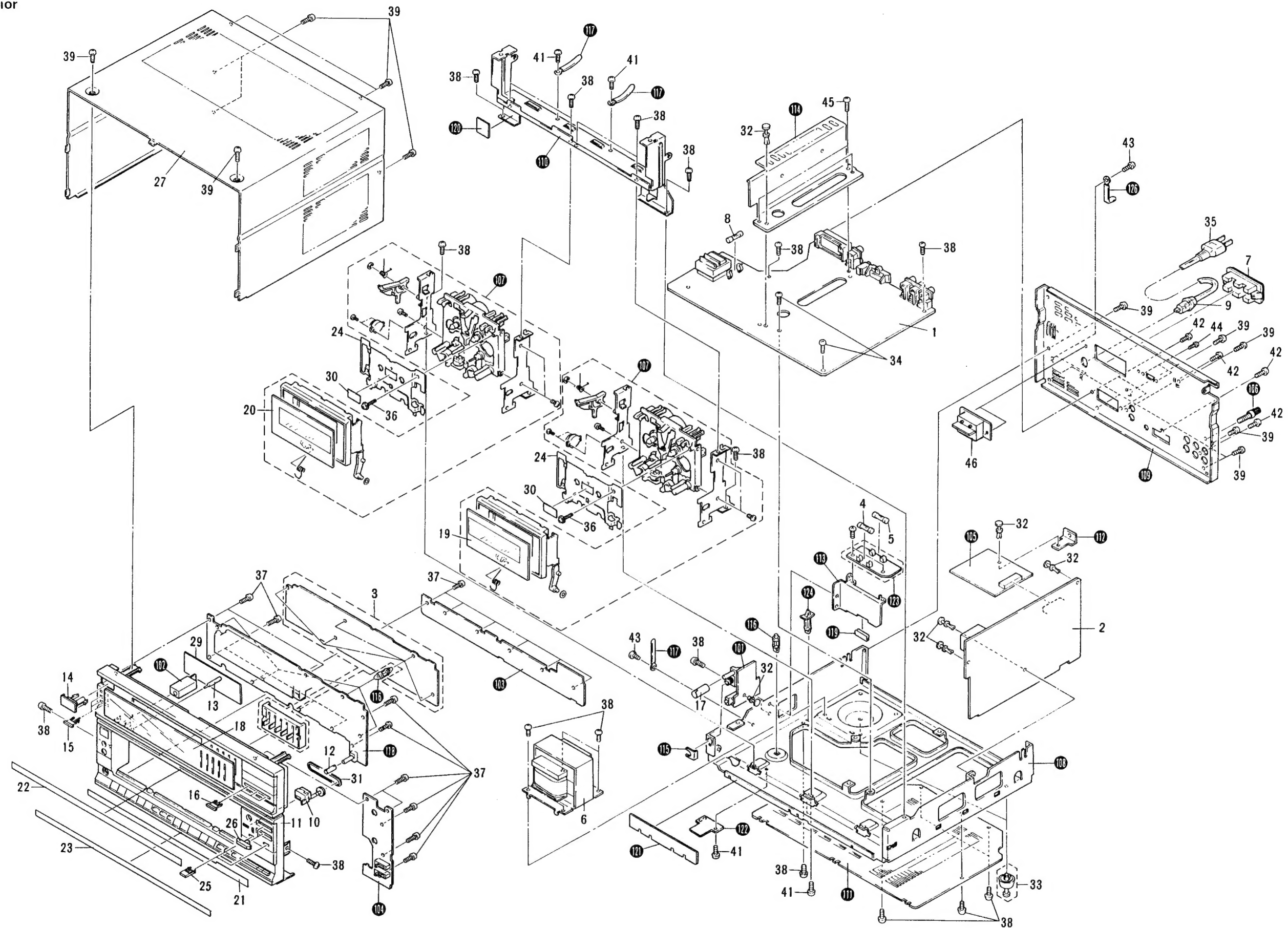
NOTES:

- Parts without part number cannot be supplied.
- The \triangle mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- For your Parts Stock Control, the fast moving items are indicated with the marks $\star\star$ and \star .
 $\star\star$ GENERALLY MOVES FASTER THAN \star
 This classification should be adjusted by each distributor because it depends on model number, temperature, humidity, etc.
- Parts marked by " \odot " are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.

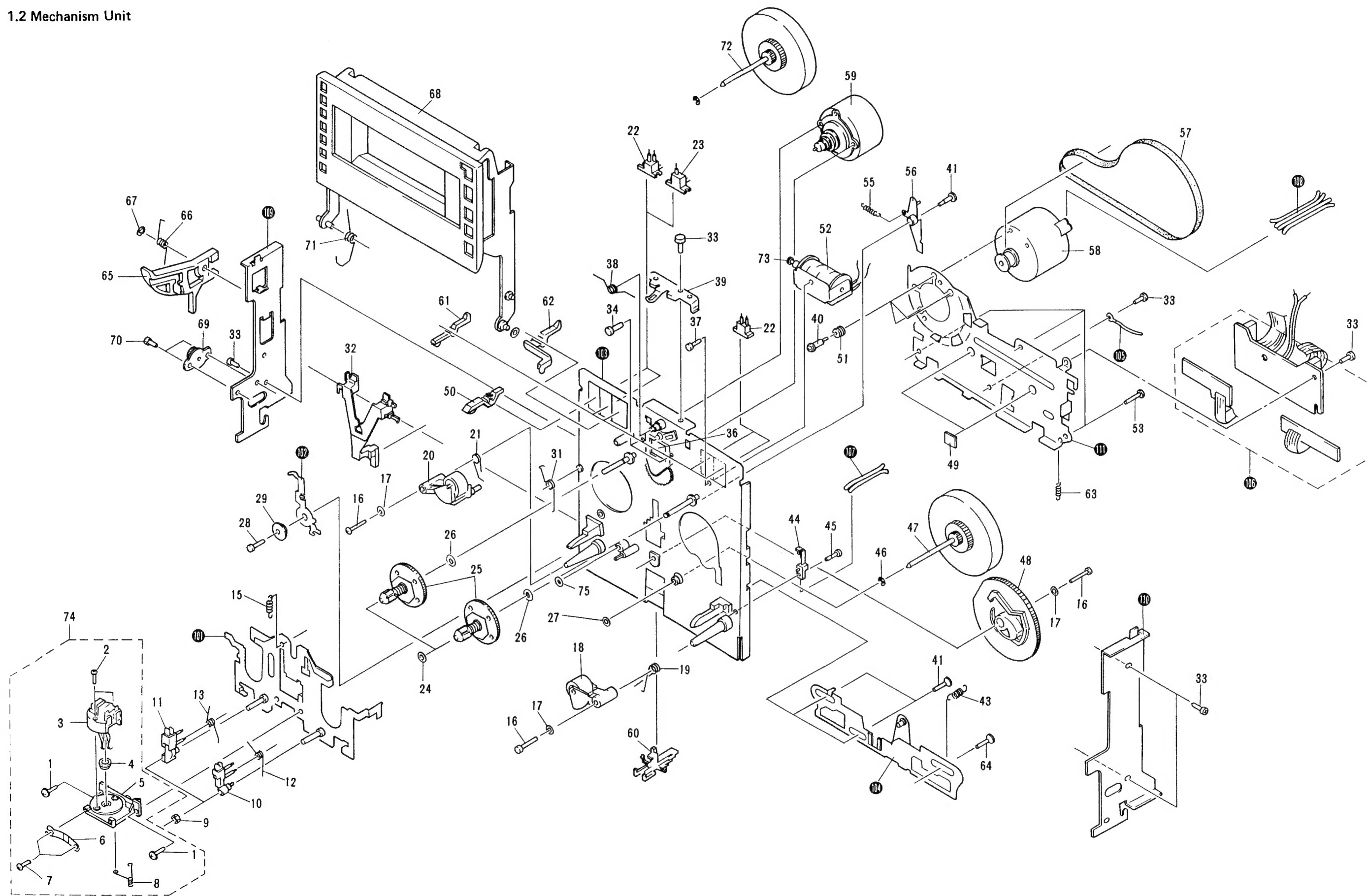
Parts List of Exterior

| Mark | No. | Part No. | Description | Mark | No. | Part No. | Description |
|-----------------------|-----|--------------|---|-----------------------|-----|--------------|------------------------|
| \triangle \odot | 1 | AWZ1306 | Power μ COM assembly | | 38 | BBZ30P080FMC | Screw |
| \odot | 2 | AWZ1230 | TAPE assembly | | 39 | BBZ30P080FZK | Screw |
| \odot | 3 | AWZ1226 | GEQ E-VR assembly | | 40 |  | ..... |
| $\triangle\star\star$ | 4 | AEK-402 | FU1 Fuse (T1A/250V) | | 41 | VCZ30P060FMC | Screw |
| $\triangle\star\star$ | 5 | AEK-403 | FU3 Fuse (T2.5A/250V) | | 42 | BPZ30P080FZK | Screw |
| $\triangle\star$ | 6 | ATS1058 | T1 Power transformer | | 43 | BCZ30P060FZK | Screw |
| | | (AC220/240V) | | | 44 | VMZ30P060FZK | Screw |
| \triangle | 7 | AKP-502 | AC socket (AC OUTLETS) | | 45 | ABZ30P100FMC | Screw |
| $\triangle\star\star$ | 8 | AEK-017 | FU2 Fuse (2A/250V) | | | | |
| \triangle | 9 | AEC-882 | Strain relief | $\triangle\star\star$ | 46 | ASH-501 | Slide switch |
| | 10 | AAW1002 | Tape counter | | | (MAIN POWER) | |
| | 11 | AMB1142 | Front panel assembly | | 101 | | MIC headphone assembly |
| | 12 | AAB-411 | Knob (REC LEVEL) | | 102 | | Remote sensor assembly |
| | 13 | AAD1094 | Knob (ADJUST) | | 103 | | Tact SW assembly |
| | 14 | AAD1090 | Knob (POWER) | | 104 | | DOLBY SW assembly |
| | 15 | AAD1091 | Knob E(TIMER MODO) | | 105 | | DOLBY B/C assembly |
| | 16 | AAD1092 | knob E(MUTING,BALANCE) | | 106 | | Terminal (GND) |
| | 17 | AAB1016 | Knob (MIXING) | | 107 | | Mechanism unit |
| | 18 | AAK1202 | P.C. panel | | 108 | | Chassis |
| | 19 | AAK1198 | Cassette plate | | 109 | | Rear panel |
| | 20 | AAK1155 | Cassette plate | | 110 | | Panel stay |
| | 21 | AAK1197 | Deck panel | | 111 | | Bottom plate |
| | 22 | AAP1047 | Aluminum panel | | 112 | | F.E. holder |
| | 23 | AAP1025 | Aluminum panel | | 113 | | Transformer holder |
| | 24 | AAP1028 | Mechanism cover | | 114 | | Heat sink |
| | 25 | AAY-355 | Push knob C (GRAPHIC EQ REC, RELAY PLAY/REC) | | 115 | | Mounting plate |
| | 26 | AAY-397 | Slide knob (REVERSE MODE) | | 116 | | PCB holder |
| | 27 | ANE1056 | Bonnet case | | 117 | | Binder |
| | 28 |  | ..... |  | 118 | | FL assembly |
| | 29 | AAK1152 | FL filter | | 119 | | Rubber B |
| | 30 | AAX1053 | Fluorescent sheet | | 120 | | Rubber A |
| | 31 | AEB1033 | Counter belt | | 121 | | Barrier |
| | 32 | AEC-525 | Nylon rivet | | 122 | | Hole cover |
| | 33 | AEC-847 | Leg assembly | | 123 | | Fuse assembly |
| | 34 |  | ..... |  | 124 | | PCB holder |
| \triangle | 35 | ADG-041 | AC power cord | | 125 | | PCB holder |
| | | (AC250V) | | | | | |
| | 36 | ATT26P120FZK | Screw | | 126 | | Binder |
| | 37 | BBZ26P080FMC | Screw | | | | |

1.1 Exterior



1.2 Mechanism Unit



NOTES:

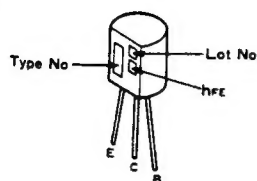
- Parts without part number cannot be supplied.
- The $\frac{1}{2}$ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- For your Parts Stock Control, the fast moving items are indicated with the marks ** and *.
- ** GENERALLY MOVES FASTER THAN *
- This classification should be adjusted by each distributor because it depends on model number, temperature, humidity, etc.
- Parts marked by "©" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.

Parts List of Mechanism Unit I,II

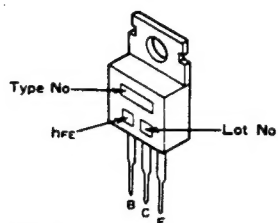
| Mark | No. | Part No. | Description | Mark | No. | Part No. | Description |
|------|-----|--------------|---------------------------|------|-----|--------------|-----------------------|
| | 1 | AXT-010 | Screw with washer | ** | 44 | AXN-036 | Leaf switch (PLAY) |
| | 2 | ATX-015 | Screw | | 45 | AZB1049 | Screw |
| ** | 3 | AZP1011 | REC/PB head | | 46 | AZB1050 | Washer |
| | 4 | AXS-123 | Cushion | | 47 | AZN1218 | F/W assembly (R) |
| | 5 | AXP-049 | HD base | | 48 | AZN1219 | Cam gear (E) |
| | 6 | AXV-120 | Spring | | 49 | AZN1226 | Spacer |
| | 7 | AXT-016 | Screw | | 50 | AZS1025 | PACK detector lever |
| | 8 | AXV-121 | Spring | | 51 | AXW-038 | Motor cushion |
| | 9 | AXS-109 | Adjustment nut | * | 52 | AZS1028 | Solenoid |
| | 10 | AXS-110 | Tape guide | | 53 | PBZ26P080FMC | Screw |
| | 11 | AXS-111 | Sensor holder | | 54 | ..... | ..... |
| | 12 | AXV-107 | Adjustment spring (R) | | 55 | AXV-116 | Play arm spring |
| | 13 | AXV-108 | Adjustment spring (L) | | 56 | AZN1221 | Play arm assembly |
| | 14 | ..... | ..... | ** | 57 | AZN1222 | Main belt |
| | 15 | AXV-109 | Head base spring | ** | 58 | AZX1010 | Motor assembly (MAIN) |
| | 16 | PBZ20P130FMC | Screw | ** | 59 | AZX1009 | Motor assembly (REEL) |
| | 17 | WB20FMC | Washer | | 60 | AXS-117 | Lead holder |
| | 18 | AXP-043 | Pinch roller assembly (R) | | 61 | AZS1026 | REC detector lever |
| | 19 | AXV-110 | Pinch roller spring (R) | | 62 | AZS1027 | Metal detector lever |
| | 20 | AZN1220 | Pinch roller assembly (L) | | 63 | AXV-117 | Earth spring |
| | 21 | AXV-111 | Pinch roller spring (L) | | 64 | AXT-013 | Cap |
| ** | 22 | AXN-035 | Push switch | | 65 | AZN1003 | Eject cam |
| ** | 23 | AZS1001 | Push switch | | 66 | AZN1006 | Cam spring |
| | 24 | WA16D040D020 | Washer | | 67 | YE20FUC | E-ring |
| | 25 | AXP-045 | Reel assembly | ** | 68 | AZN1216 | Frame door assembly |
| | 26 | WA21D040D030 | Washer | | 69 | AZN1008 | Damper assembly |
| | 27 | AXW-039 | Washer | | 70 | PBZ20P030FMC | Screw |
| | 28 | PBZ30P080FMC | Screw | | 71 | AZN1227 | Eject spring |
| | 29 | AXS-112 | Spacer | | 72 | AZN1217 | F/W assembly (L) |
| | 30 | ..... | ..... |  | 73 | AZN1228 | Plunger |
| | 31 | AXV-112 | Anti-eject spring (L) | | 74 | AZP1010 | REC/PB head assembly |
| | 32 | ANZ1214 | Hold lever (C) | | 75 | AZB1060 | Washer |
| | 33 | PCZ30P040FMC | Screw | | 101 | | Head plate |
| | 34 | AZB1059 | Screw with washer | | 102 | | Anti-eject spring |
| | 35 | ..... | ..... |  | 103 | | Chassis |
| | 36 | AZN1215 | Idler assembly | | 104 | | Slide plate |
| | 37 | PBA26P035FMC | Screw | | 105 | | Lug |
| | 38 | AXV-113 | Hold spring | | 106 | | Control PC assembly |
| | 39 | AXV-114 | Spring | | 107 | | Wire connector |
| | 40 | ATX-012 | Motor set screw | | 108 | | Wire connector |
| | 41 | AXS-114 | Cap | | 109 | | Mounting plate (R) |
| | 42 | ..... | ..... |  | 110 | | Mounting plate (L) |
| | 43 | AXV-115 | Slide Board spring | | 111 | | F/W BRACKET |

External Appearance of Transistor and ICs

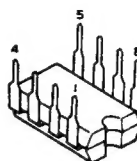
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2SC2878



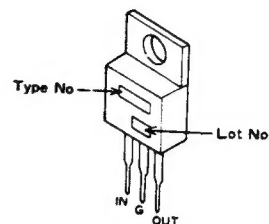
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2SD880



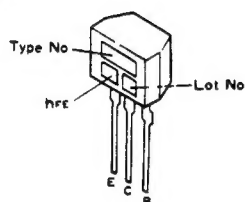
M5218P
M5218PF
M5220P



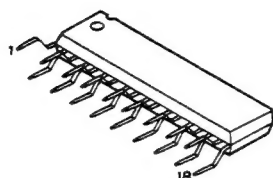
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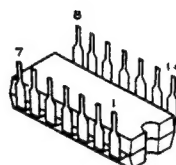
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2SC1740S



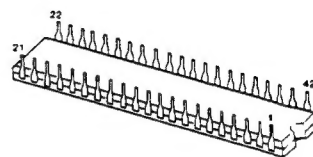
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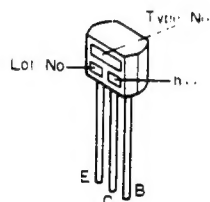
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TC4011BP
TC4066BP
μPD4001BC
μPD4011BC
μPD4066BC



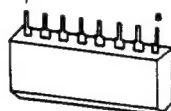
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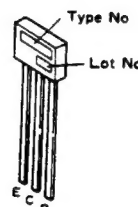
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2SC2603



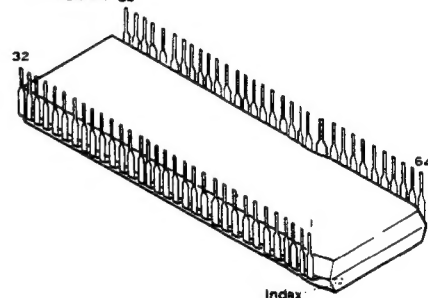
CX20106A
M5218L
M5220L
M51143AL



RN1203
RN2203



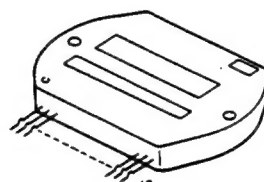
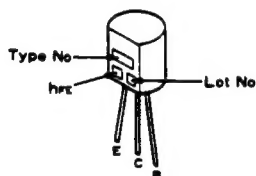
PD3081



2SA1515

CX20187

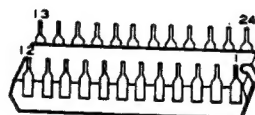
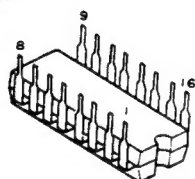
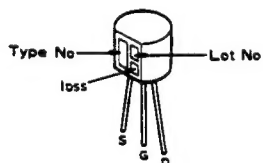
STK4141-2S



2SJ103

CXD1120P
TC4019BP
TC4052BP

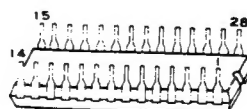
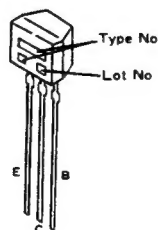
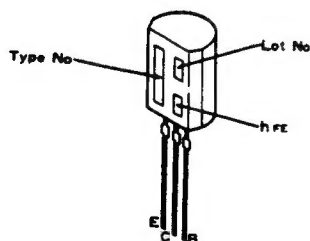
TA7780BN

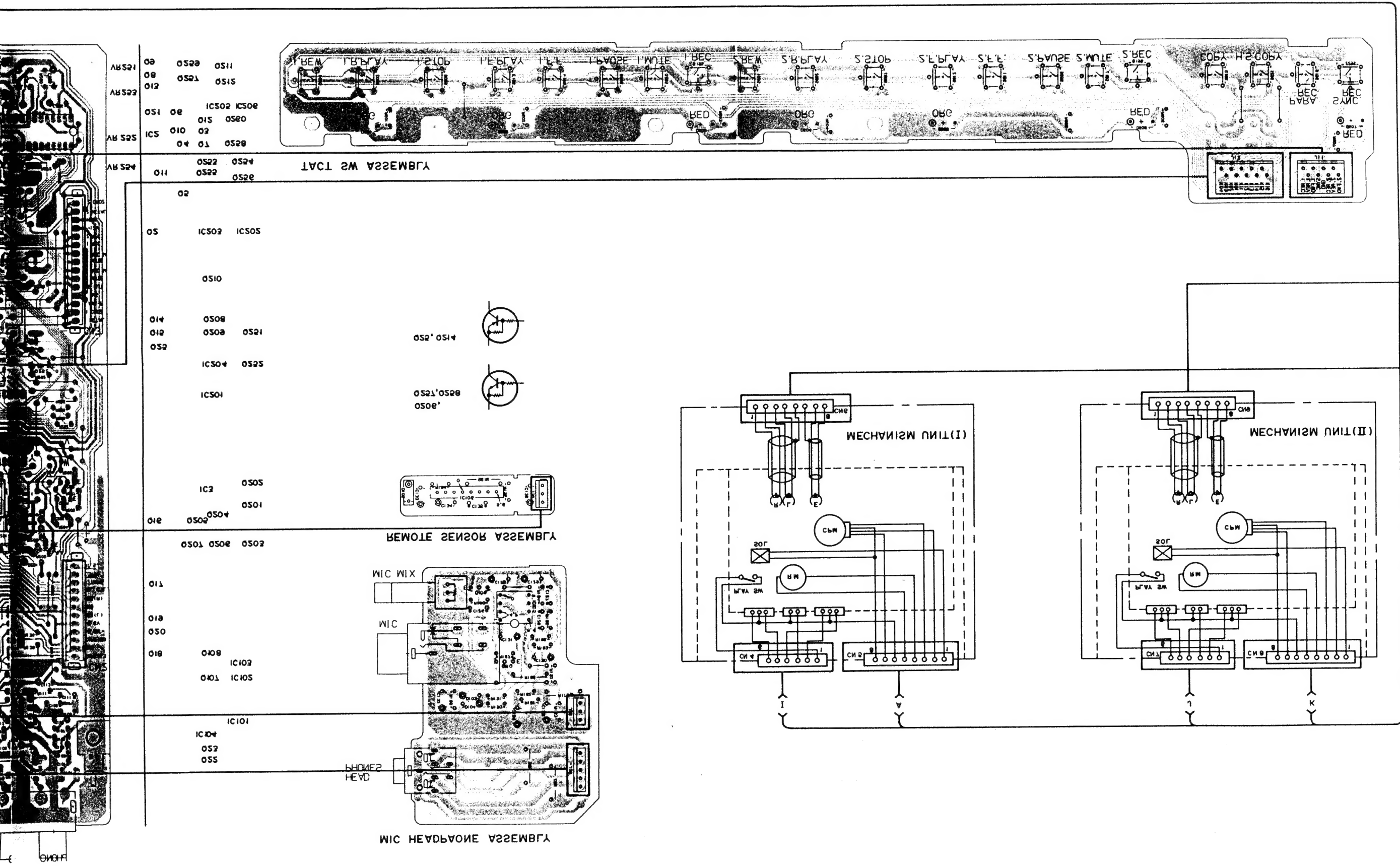


2SD438

DTA124ES
DTC124ES

TC9312N



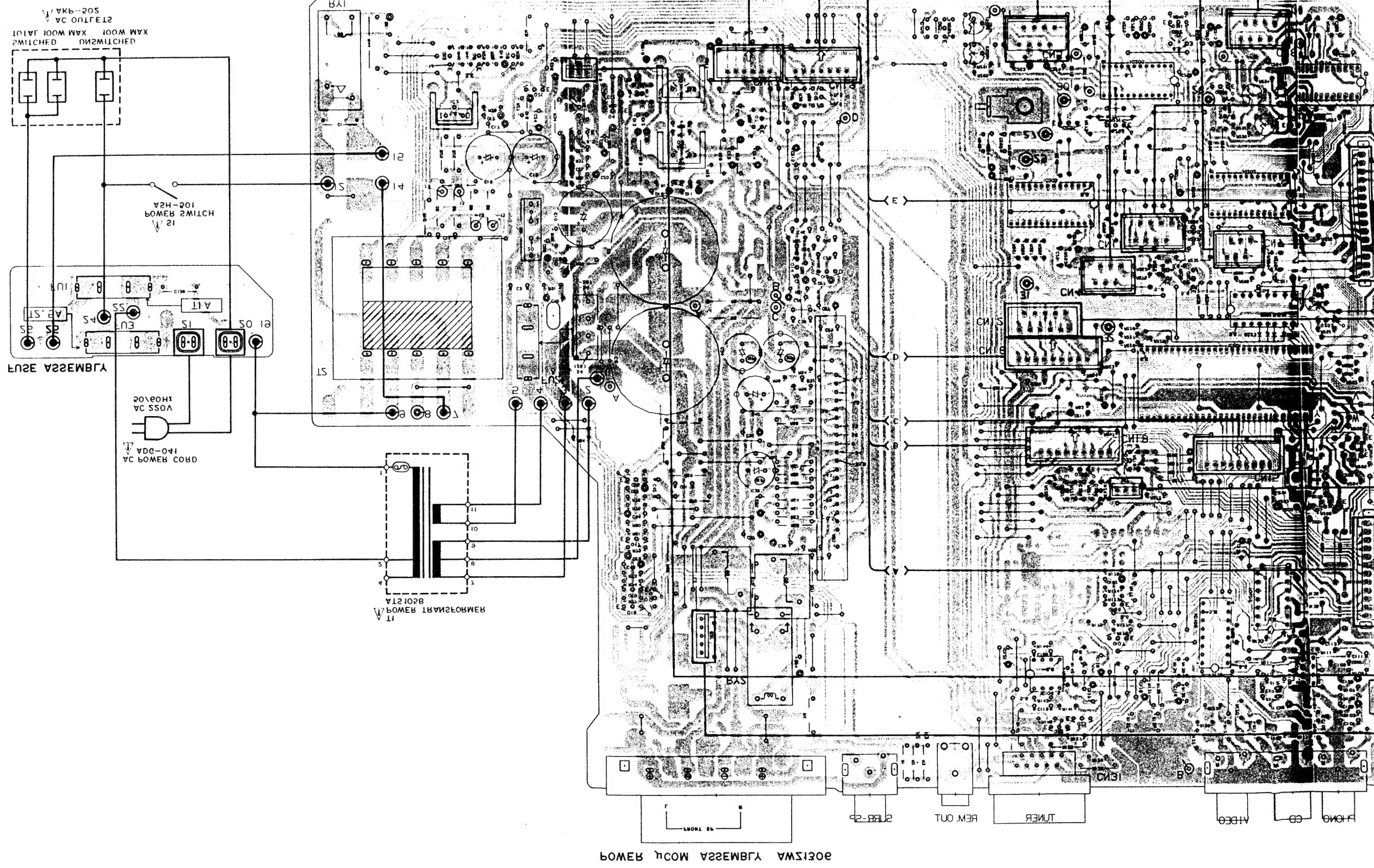


C

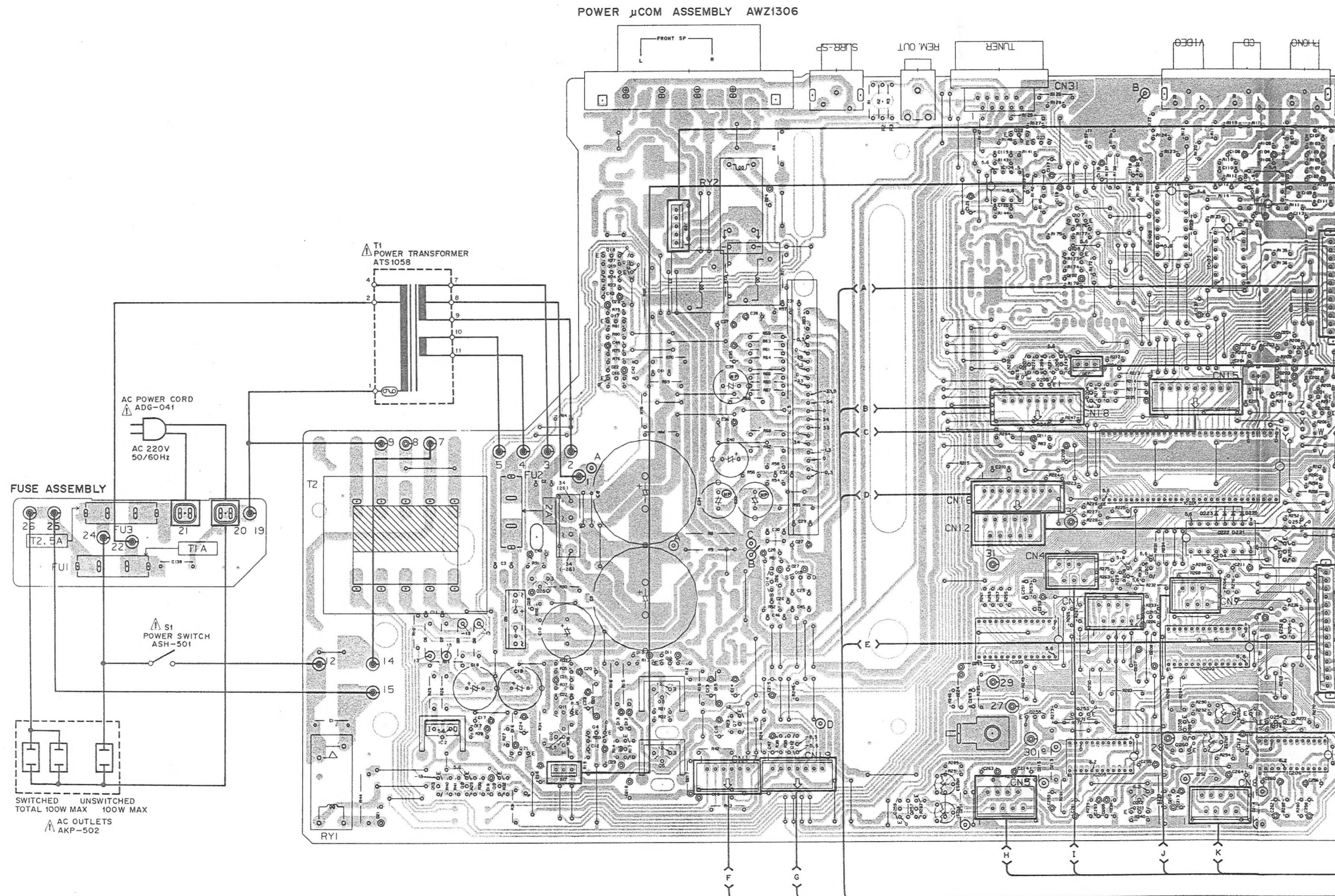
B

A

2. P.C. BOARD2 CONNECTION DIAGRAM



2. P.C.BOARDS CONNECTION DIAGRAM



7

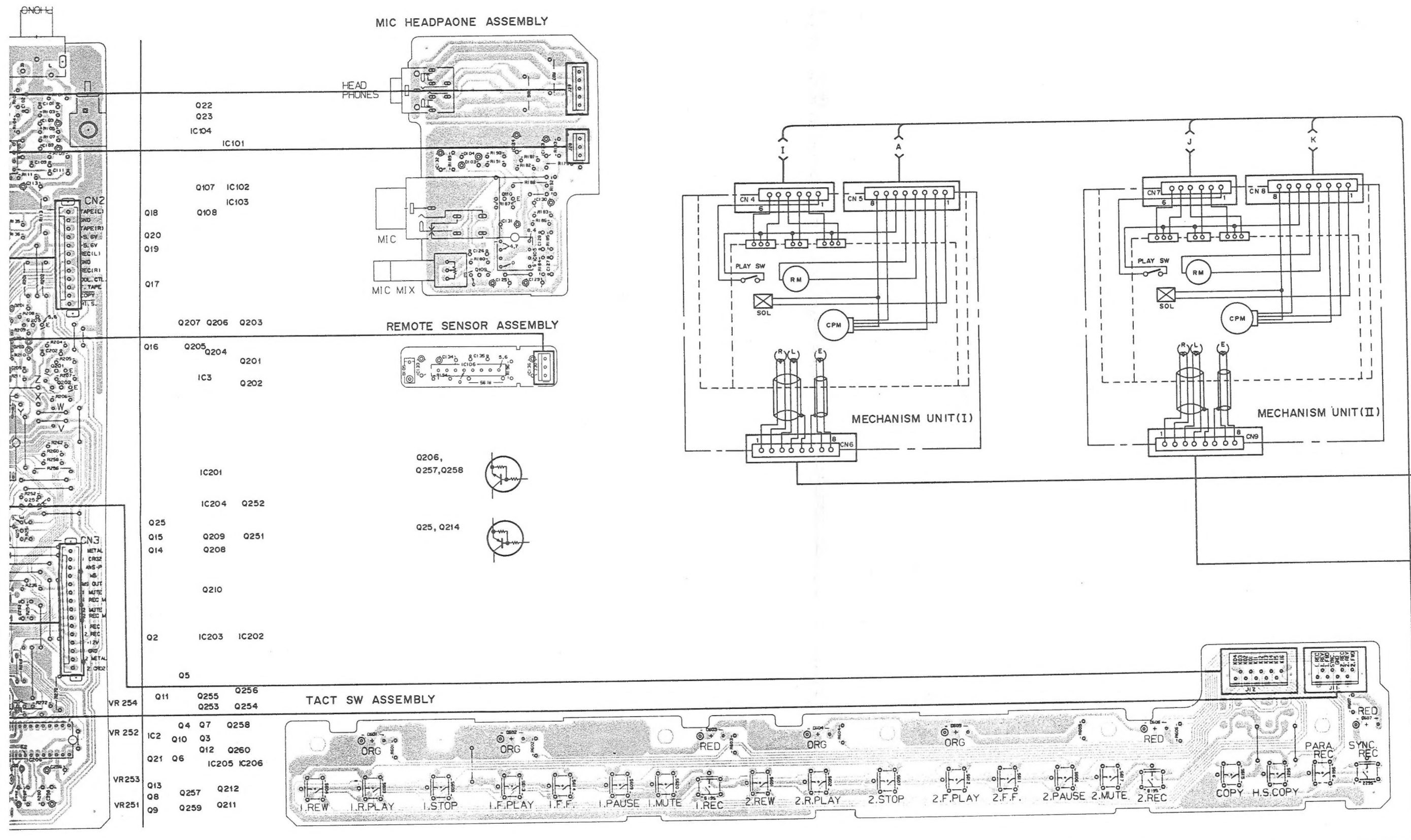
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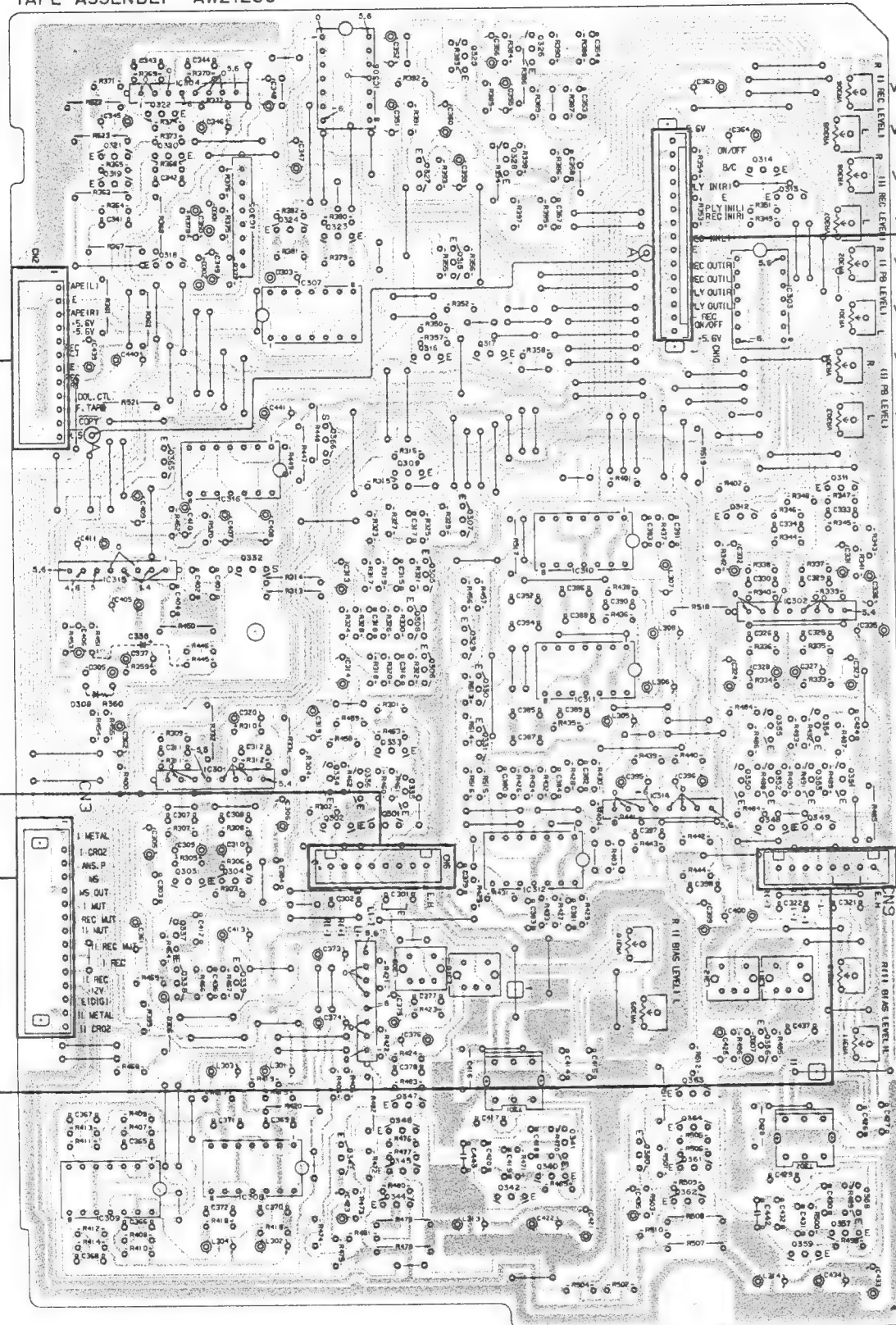
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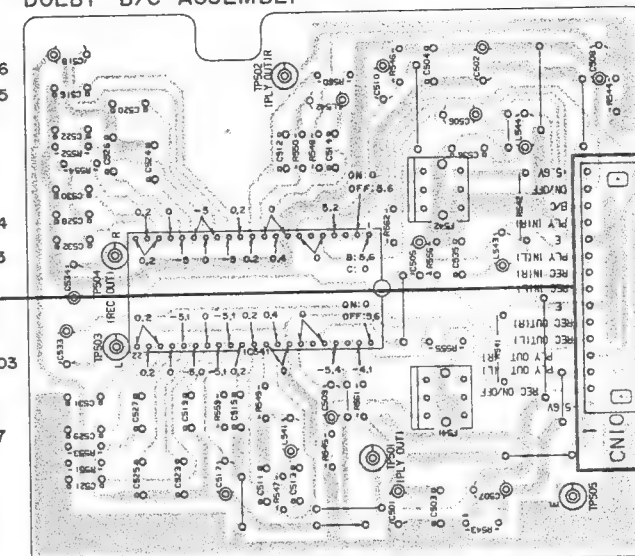
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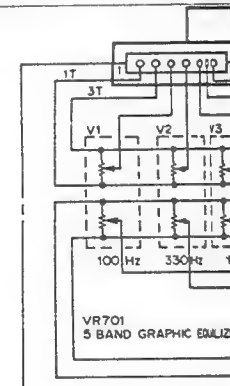
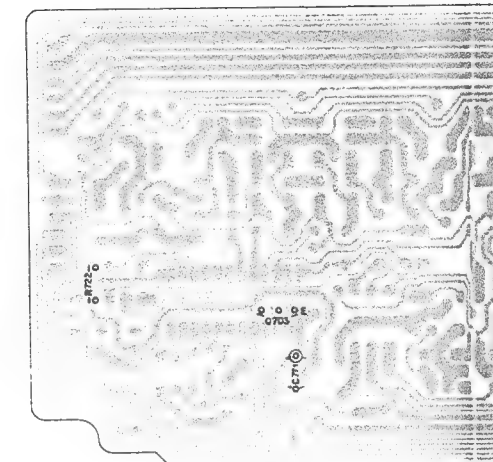
TAPE ASSEMBLY AWZ1230



DOLBY B/C ASSEMBLY



IC541 CX20187

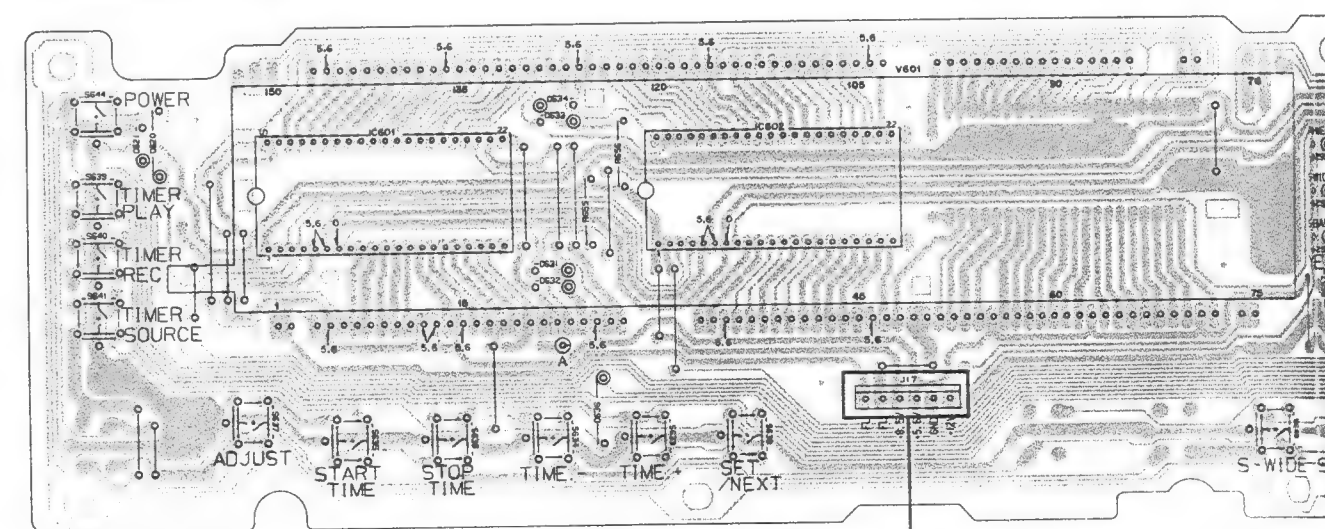


IC304 Q326
 IC306 Q325
 Q322
 Q321 Q320
 Q319 Q327 Q314
 Q313
 IC305 Q324
 Q323
 Q318 Q315
 IC307 IC303
 Q316 Q317
 Q365 Q366
 Q309 Q311
 IC316
 Q307 Q312
 IC315 IC310
 Q332 Q305
 IC302
 Q308
 Q329
 Q306
 Q330 IC311
 Q354
 Q333 Q331 Q355
 Q351
 IC301 Q334 Q353
 IC314 Q336 Q352
 Q335 Q350
 Q302 Q348
 Q301 Q349
 Q304 IC312
 Q337
 Q338 Q339
 IC313
 Q356
 Q363
 Q347 Q364
 Q343 Q341
 Q345 Q361
 Q360
 Q342 Q362
 IC308 Q344 Q358
 IC309 Q357
 Q359

FL ASSEMBLY AWZ1225

IC601

IC602



Q313, 314

Q329

19

20

21

22

23

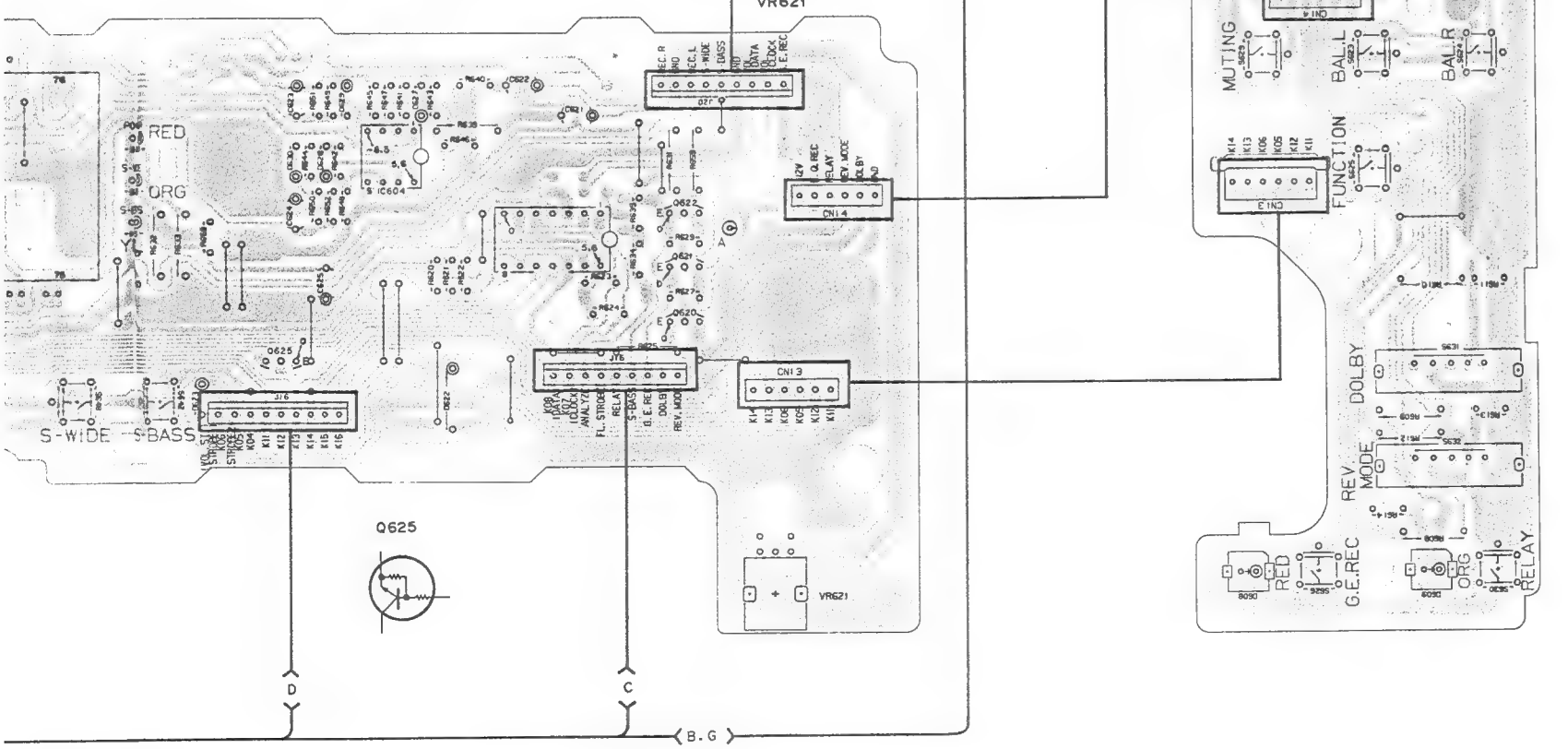
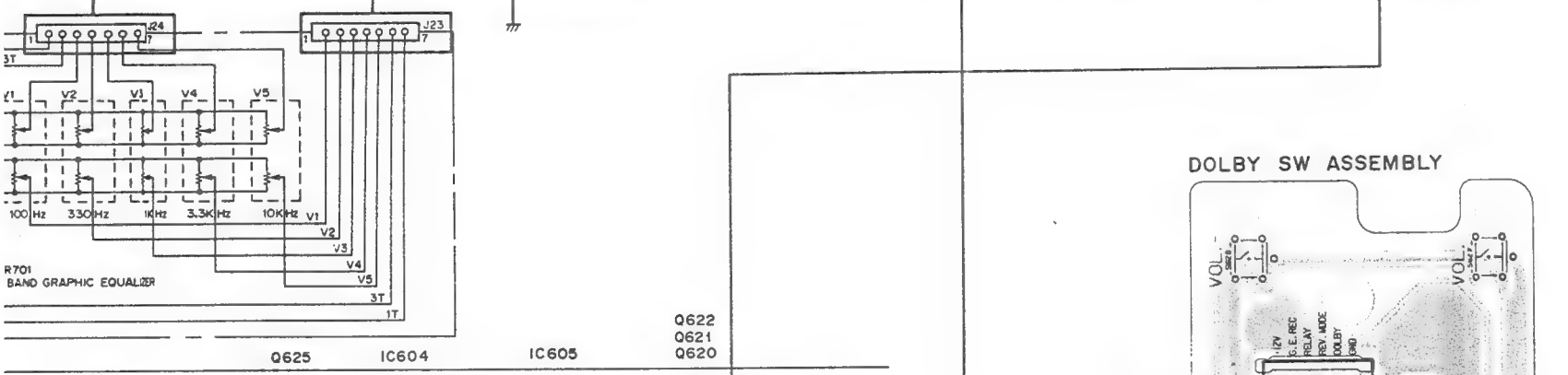
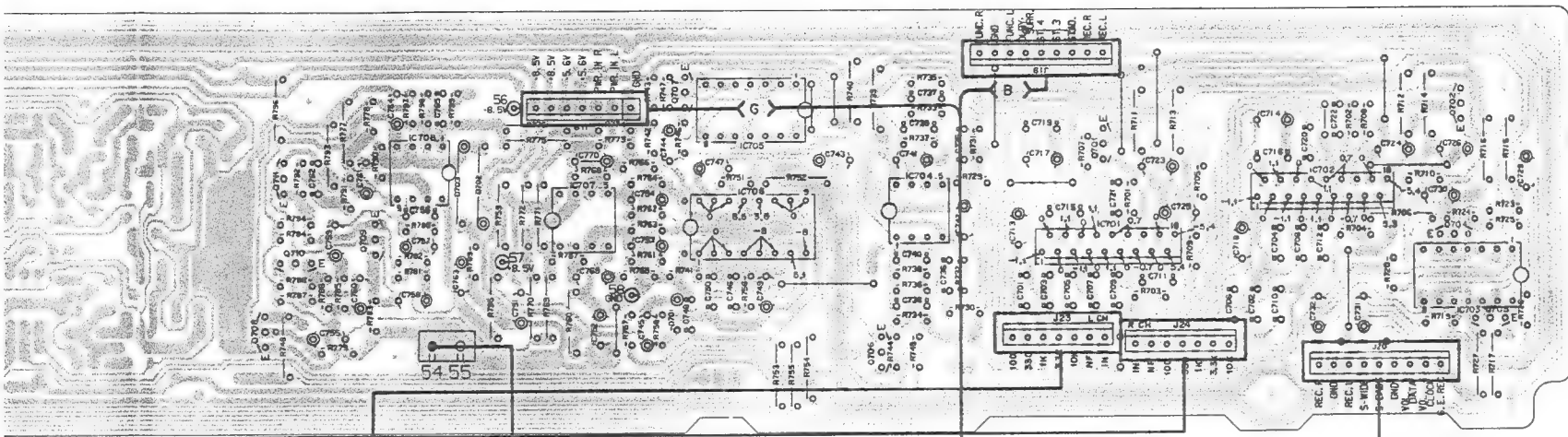
A

B

C

D

AWZ1226 Q711 IC708 Q710 Q708 Q709 IC707 Q707 IC705 IC706 IC704 Q706 Q701 IC701 IC702 Q702 Q704 IC703 Q705



NOTE
1. This P.C.B connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.

| P.C.B. pattern diagram indication | Corresponding part symbol | Part Name |
|-----------------------------------|---------------------------|--------------------------|
| Q504 | | Transistor |
| Q215 | | Radiator type transistor |
| D203 | | Diode |
| R237 | | Resistor |
| C513 | | Capacitor (Polarity) |
| C518 | | Capacitor (Non-polarity) |

| P.C.B. pattern diagram indication | Part Name |
|-----------------------------------|--|
| IC | IC |
| S | Switch |
| RY | Relay |
| L | Coil |
| F | Filter |
| VR | Variable resistor or Semi-fixed resistor |

3. The capacitor terminal marked with⊙(double circles) shows negative terminal.
4. The diode terminal marked with⊙(double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.

19

20

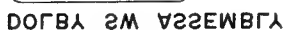
21

22

23

24

20



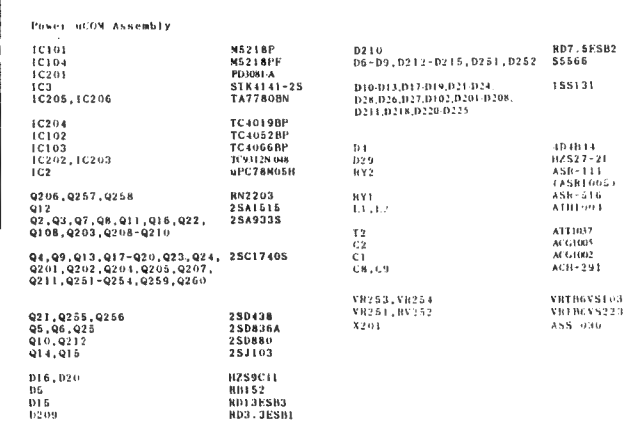
| | |
|-----------------------------------|-----------------------|
| VB | Variable indicator of |
| E | Error |
| C | Cost |
| RY | Reply |
| Z | Switch |
| IC | IC |
| P.C.B. pattern diagram indication | Part Name |

NOTE

NOTE

D

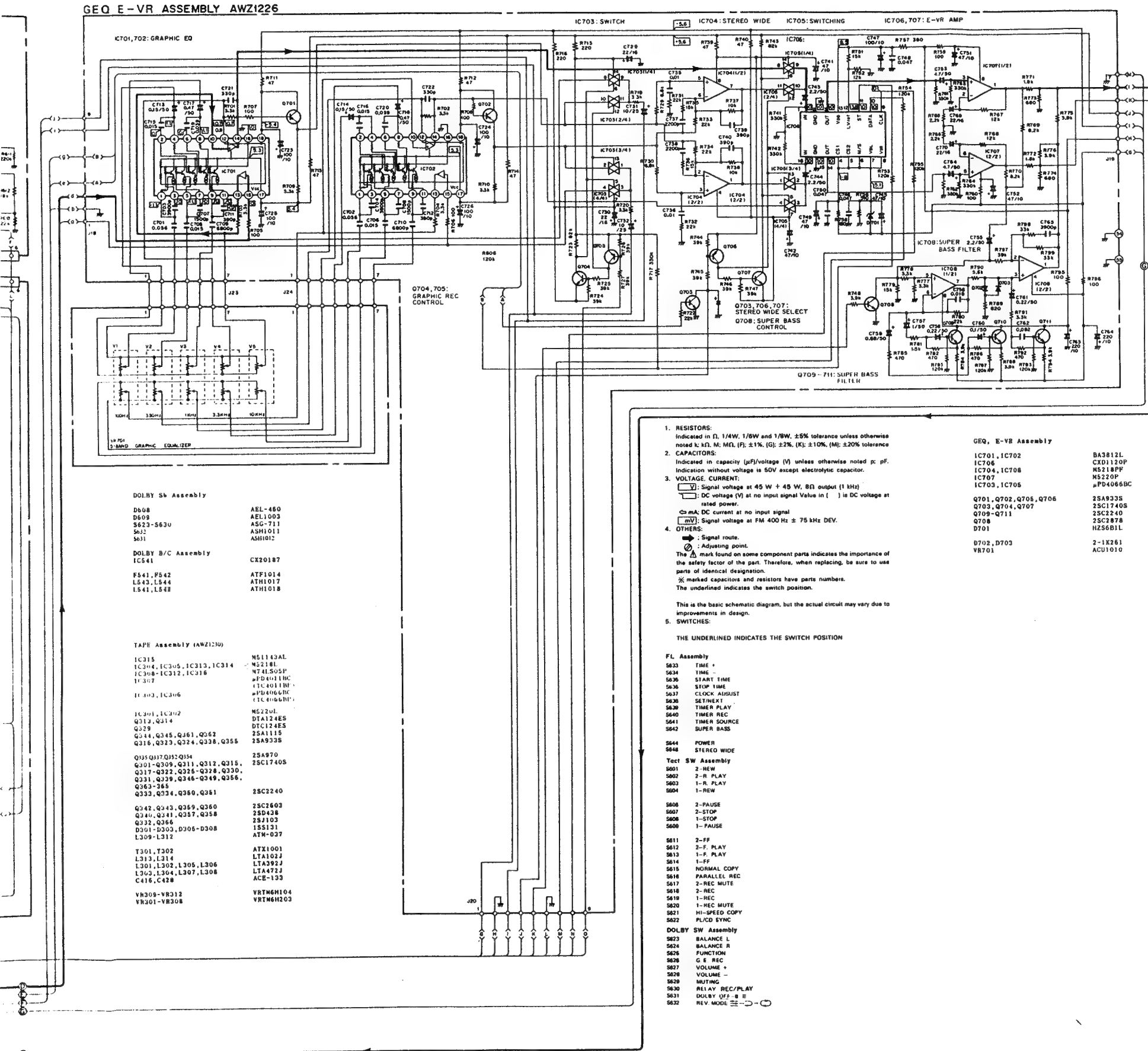




NOTE:

The indicated semiconductors are representative ones only. Other alternative semiconductors may be used and are listed in the parts list.

GEO E-VR ASSEMBLY AWZ1226



1. RESISTORS:
Indicated in Ω , 1/4W, 1/8W and 1/10W, $\pm 5\%$ tolerance unless otherwise noted; k: k Ω , M: M Ω , (F): $\pm 1\%$, (G): $\pm 2\%$, (K): $\pm 10\%$, (M): $\pm 20\%$ tolerance.
2. CAPACITORS:
Indicated in capacity (μ F)/voltage (V) unless otherwise noted; p: pF. Indication without voltage is 50V except electrolytic capacitor.
3. VOLTAGE, CURRENT:
V: Signal voltage at 45 W + 45 W, 8 Ω output (1 kHz)
V: DC voltage (V) at no input signal value in [] is DC voltage at rated power.
mA: DC current at no input signal
V: Signal voltage at FM 400 Hz ± 75 kHz DEV.
4. OTHERS:
S: Signal route.
A: Adjusting point.
The Δ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
* marked capacitors and resistors have parts numbers.
The underlined indicates the switch position.

This is the basic schematic diagram, but the actual circuit may vary due to improvements in design.

5. SWITCHES:

THE UNDERLINED INDICATES THE SWITCH POSITION

FL Assembly

5623 TIME +
5624 TIME -
5625 START TIME
5626 STOP TIME
5627 CLOCK ADJUST
5628 SET/RESET
5629 TIMER PLAY
5630 TIMER REC
5631 TIMER SOURCE
5632 SUPER BASS

5644 POWER

5645 STEREO WIDE

Tact SW Assembly

5601 2-REW

5602 2-R PLAY

5603 1-R PLAY

5604 1-REW

5605 2-PAUSE

5606 2-STOP

5607 1-STOP

5608 1-PAUSE

5609 2-FF

5610 2-F PLAY

5611 1-F PLAY

5612 1-FF

5613 NORMAL COPY

5614 PARALLEL REC

5615 2-REC MUTE

5616 2-REC

5617 1-REC

5618 1-REC MUTE

5619 HI-SPEED COPY

5620 PLCD SYNC

DOLBY SW Assembly

5621 BALANCE L

5622 BALANCE R

5623 FUNCTION

5624 G E REC

5625 VOLUME +

5626 VOLUME -

5627 MUTE

5628 RELAY REC/PLAY

5629 DOLBY OFF-B

5630 REV MODE

GEO, E-VR Assembly

IC701, IC702

IC706

IC704, IC708

IC707

IC703, IC705

Q701, Q702, Q705, Q706

Q703, Q704, Q707

Q709-Q711

Q708

D701

D702, D703

VR701

BA3812L

CXD1120P

MS181PF

MS220P

 μ PD4066BC

2SA933S

2SC1740S

2SC2240

2SC2878

H256B1L

2-1K361

ACU1010

4. ELECTRICAL PARTS LIST

NOTES:

- When ordering resistors, first convert resistance values into code form as shown in the following examples.

Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J=5%, and K=10%).

| | | |
|------|----------------------|---------------------|
| 560Ω | 56 × 10 ¹ | 561.....RD½PS 561 J |
| 47kΩ | 47 × 10 ³ | 473.....RD½PS 473 J |
| 0.5Ω | 0R5 | RN2H 0R5 K |
| 1Ω | 010 | RS1P 010 K |

Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).

| | | |
|--------|-----------------------|------------------------|
| 5.62kΩ | 562 × 10 ¹ | 5621 RN½SR 5621 F |
|--------|-----------------------|------------------------|

- The Δ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- For your Parts Stock Control, the fast moving items are indicated with the marks ** and *.
- ** GENERALLY MOVES FASTER THAN *
- This classification should be adjusted by each distributor because it depends on model number, temperature, humidity, etc.
- Parts marked by "⊙" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.

Miscellaneous Parts P.C BOARD ASSEMBLIES

| Mark | Symbol & Description | Part No. |
|------------|------------------------|------------|
| Δ ⊙ | Power μCOM assembly | AWZ1306 |
| ⊙ | GEQ E-VR assembly | AWZ1226 |
| ⊙ | TAPE assembly | AWZ1230 |
| | FL assembly | Non supply |
| | MIC headphone assembly | Non supply |
| | Remote sensor assembly | Non supply |
| | Tact SW assembly | Non supply |
| | DOLBY SW assembly | Non supply |
| | DOLBY B/C assembly | Non supply |
| | Fuse assembly | Non supply |

OTHERS

| Mark | Symbol & Description | Part No. |
|-------------|-----------------------------------|----------|
| Δ * | T1 Power transformer (AC220/240V) | ATS1058 |
| Δ ** | S1 Slide switch (POWER) | ASH-501 |
| Δ ** | FU1 Fuse (T1A/250V) | AEK-402 |
| Δ ** | FU2 Fuse (T2A/250V) | AEK-017 |
| Δ ** | FU3 Fuse (T2.5A/250V) | AEK-403 |
| Δ | AC power cord (AC/250V) | ADG-041 |
| Δ | AC socket (AC OUTLETS) | AKP-502 |
| | Remote control unit | AXD1016 |
| ** | REC/PB head (HADKH5515A) | AZP1011 |
| ** | Push switch | AXN-035 |
| ** | Push switch | AZS1001 |
| ** | Leaf switch (PLAY) | AXN-036 |
| * | Solenoid | AZS1028 |
| ** | Motor assembly(Main) | AZX1010 |
| ** | Motor assembly(Reel) | AZX1009 |

Power μCOM Assembly (AWZ1306) SEMICONDUCTORS

| Mark | Symbol & Description | Part No. |
|-------------|--|-------------|
| ** | IC101 | M5218P |
| ** | IC104 | M5218PF |
| ** | IC201 | PD3081-A |
| Δ ** | IC3 | STK4141-2S |
| ** | IC205, IC206 | TA77808N |
| ** | IC204 | TC40198P |
| ** | IC102 | TC40528P |
| ** | IC103 | TC40668P |
| ** | IC202, IC203 | TC9312N-048 |
| Δ ** | IC2 | μPC78M05 H |
| ** | Q206, Q257, Q258 | RN2203 |
| ** | Q12 | 2SA1515 |
| ** | Q2, Q3, Q7, Q8, Q11, Q16, Q22, Q108, Q203, Q208—Q210 | 2SA933S |
| ** | Q4, Q9, Q13, Q17—Q20, Q23, Q201, Q202, Q204, Q205, Q207, Q211, Q251—Q254, Q259, Q260 | 2SC1740S |
| ** | Q21, Q255, Q256 | 2SD438 |
| ** | Q5, Q6, Q25 | 2SD836A |
| ** | Q10, Q212 | 2SD880 |
| ** | Q14, Q15 | 2SJ103 |
| Δ * | D16, D20 | HZS9CIL |
| * | D5 | RB152 |
| * | D15 | RD13ESB3 |
| * | D209 | RD3.3ESB1 |
| * | D210 | RD7.5ESB2 |
| Δ * | D6—D9, D212—D215, D251, D252 | S5566 |

★ D10—D13, D17—D19,
D21—D24, D26—D28,
D102, D201—D208, D211,
D220—D225

1SS131

△ ★ D4
★ D29

4D4B44
HZS27-2L

C210
C202, C265
C109, C110
C41, C42
C111, C112

CKCYF473Z50
CKCYX473M25
CQMA152K50
CQMA473K50
CQMA562K50

C29, C30

CQMXA102J100

RELAY

| Mark | Symbol & Description | Part No. |
|------|----------------------|----------------------|
| ★★ | RY2 | ASR-111 (ASR1005) |
| △ ★★ | RY1 | ASR-516 |

COILS & TRANSFORMER

| Mark | Symbol & Description | Part No. |
|------|----------------------|----------|
| | L1, L2 AF choke coil | ATH1004 |
| △ ★ | T2 Power transformer | ATT1037 |

CAPACITORS

| Mark | Symbol & Description | Part No. |
|------|--|--------------|
| △ | C2 (0.01μF/AC150V) | ACG1005 |
| △ | C1 (0.01μF/AC400V) | ACG1002 |
| △ | C8, C9 (5600μF/42V) | ACH-291 |
| | C206, C207 | CCCCH330J50 |
| | C101, C102, C105, C106, C119, C120 | CCCSL101J50 |
| | C25, C26 | CCCSL221J50 |
| | C31, C32 | CCCSL470J50 |
| | C39 | CEANP100M50 |
| | C215, C257, C258 | CEAS010M50 |
| | C201, C255, C256, C259—C262 | CEAS100M25 |
| | C253, C254 | CEAS0R1M50 |
| | C44 | CEAS100M50 |
| | C12, C20, C21, C23, C113, C144, C121 | CEAS101M10 |
| | C103, C104, C203 | CEAS2R2M50 |
| | C107, C108, C213 | CEAS220M16 |
| | C43 | CEAS471M6 |
| | C17, C24, C47, C209, C211, C212, C214 | CEAS221M10 |
| | C263, C264 | CEAS221M16 |
| | C18, C19 | CEAS222M16 |
| △ | C48 | CEHAQ330M35 |
| | C10 | CEAS332M25 |
| | C204 | CEAS4R7M50 |
| | C13—C16 | CEAS470M16 |
| | C37, C38 | CEAS470M50 |
| | C115, C116 | CEYA100M25 |
| | C33, C34 | CEYANP330M25 |
| | C35, C36 | CEYA101M25 |
| | C117, C118 | CEYA4R7M50 |
| | C27, C28 | CEYA2R2M50 |
| | C40 | CEYA470M50 |
| | C205 | CKCYB222K50 |
| | C22, C208 | CKCYB471K50 |
| | C251, C252 | CKCYB822K50 |
| | C3, C11 | CKCYF103Z50 |

RESISTORS

NOTE: When ordering resistors, convert the resistance value into code form, and then rewrite the part no. as before.

| Mark | Symbol & Description | Part No. |
|------|-------------------------------------|---------------|
| △ | R26, R90 | RD1/2PMF□□□J |
| | R1—R4 | RD1/2PM□□□J |
| △ | R63, R64, R66—R70 | RD1/4PMFL□□□J |
| △ | R25, R34, R71, R72, R113, R114 | RD1/4PMF□□□J |
| | R10, R11, R42, R43, R59—R62, R65 | RD1/4PM□□□J |
| △ | R85 | RS1LMF681J |
| △ | R15, R16 | RS1LMF2R2J |
| △ | R8, R44, R239, R277, R278, R9 | RS2LMF□□□J |
| ★ | VR253, VR254 Semi-fixed(10k) | VRTB6VS103 |
| ★ | VR251, VR252 Semi-fixed(22k) | VRTB6VS223 |
| | Other resistors | RD1/8PM□□□J |

OTHERS

| Mark | Symbol & Description | Part No. |
|------|---------------------------------|----------|
| | Jack 2P (SURROUND SPEAKERS) | AKB-093 |
| | Jack 6P (PHONO, CD, VIDEO) | AKB-095 |
| | Jack (REMOTE OUT) | AKN-207 |
| | X201 Ceramic resonator | ASS-030 |
| | Terminal 4P (FRONT SPEAKERS) | AKE-109 |

FL Assembly SEMICONDUCTORS

| Mark | Symbol & Description | Part No. |
|------|-------------------------------|-----------|
| ★★ | IC601, IC602 | LC7570 |
| ★★ | IC604 | M5218PF |
| ★★ | IC605 | μPD4001BC |
| ★★ | Q620—Q622 | 2SC1740S |
| ★★ | Q625 | DTC124ES |
| ★ | D624 | AEL1027 |
| ★ | D626 | AEL-429 |
| ★ | D625 | AEL1032 |
| ★ | D627, D628 | RD3.3ESB |
| ★ | D620—D623, D629—D634, D636 | 1SS131 |

SWITCHES

| Mark | Symbol & Description | Part No. |
|------|--|----------|
| ★★ | S633—S642, S644, S648 Tact switch (TIME(+), TIME(-), START TIME, STOP TIME, CLOCK ADJUST, SET/NEXT, TIMER PLAY, TIMER REC, TIMER SOURCE, SUPER BASS, POWER, STEREO WIDE,) | ASG-711 |

CAPACITORS

| Mark | Symbol & Description | Part No. |
|------|----------------------|------------|
| | C623, C624 | CEJA010M50 |
| | C621, C622 | CEJA2R2M50 |

RESISTORS

NOTE: When ordering resistors, convert the resistance value into code form, and then rewrite the part no. as before.

| Mark | Symbol & Description | Part No. |
|------|--|-----------------|
| ★ | VR621 Variable resistor (10k) (REC LEVEL) | ACS1004 |
| | R631—R633 | RD1/4PM □ □ □ J |
| | Other resistors | RD1/8PM □ □ □ J |

OTHERS

| Mark | Symbol & Description | Part No. |
|------|----------------------|----------|
| ★ | V601 FL indicator | AAV1007 |

GEQ, E-VR Assembly(AWZ1226)

SEMICONDUCTORS

| Mark | Symbol & Description | Part No. |
|------|------------------------|-----------|
| ★★ | IC701, IC702 | BA3812L |
| ★★ | IC706 | CXD1120P |
| ★★ | IC704, IC708 | M5218PF |
| ★★ | IC707 | M5220P |
| ★★ | IC703, IC705 | μPD4066BC |
| ★★ | Q701, Q702, Q705, Q706 | 2SA933S |
| ★★ | Q703, Q704, Q707 | 2SC1740S |
| ★★ | Q709—Q711 | 2SC2240 |
| ★★ | Q708 | 2SC287B |
| ★ | D701 | HZS6B1L |
| ★ | D702, D703 | 2-1K261 |

CAPACITORS

| Mark | Symbol & Description | Part No. |
|------|-------------------------|-------------|
| | C713, C714 | CEASR15M50 |
| | C758, C761 | CEASR22M50 |
| | C717, C718 | CEASR47M50 |
| | C759 | CEASR68M50 |
| | C760 | CEASOR1M50 |
| | C757 | CEAS010M50 |
| | C731, C732, C771 | CEAS100M25 |
| | C723—C726, C747 | CEAS101M10 |
| | C755 | CEAS2R2M50 |
| | C729, C730 | CEAS220M16 |
| | C763, C764 | CEAS221M10 |
| | C741, C742, C749, C751, | CEAS470M10 |
| | C752, C745 | |
| | C743, C744 | CEYA2R2M50 |
| | C753, C754 | CEYA4R7M50 |
| | C735, C736 | CKCYB103K50 |
| | C769, C770 | CEYA220M16 |
| | C707, C708 | CKCYB152K50 |
| | C737, C738 | CKCYB222K50 |
| | C721, C722 | CKCYB331K50 |
| | C711, C712, C739, C740 | CKCBY391K50 |

| | |
|------------------------|-------------|
| C703, C704, C765 | CKCYB392K50 |
| C709, C710 | CKCYB682K50 |
| C705, C706, C715, C716 | CKCYX153M25 |
| C756 | CKCYX183M25 |
| C719, C720 | CKCYX393M25 |

| | |
|------------------|-------------|
| C746, C748, C750 | CKCYX473M25 |
| C701, C702 | CKCYX563M25 |
| C762 | CQMA823K50 |

RESISTORS

NOTE: When ordering resistors, convert the resistance value into code form, and then rewrite the part no. as before.

| Mark | Symbol & Description | Part No. |
|------|--|-----------------|
| ★ | VR701 Variable resistor (GEQ, E-Volume) | ACU1010 |
| | R759, R760, R795, R796, R711—R714, R739, R740 | RD1/4PM □ □ □ J |
| | Other resistors | RD1/8PM □ □ □ J |

TAPE Assembly (AWZ1230)

SEMICONDUCTORS

| Mark | Symbol & Description | Part No. |
|------|--|-------------------------|
| ★★ | IC315 | M51143AL |
| ★★ | IC304, IC305, IC313, IC314 | M5218L |
| ★★ | IC308—IC312, IC316 | M74LS05P |
| ★★ | IC307 | μPD4011BC (TC4011BP) |
| ★★ | IC303, IC306 | μPD4066BC (TC4066BP) |
| ★★ | IC301, IC302 | M5220L |
| ★★ | Q313, Q314 | DTA124ES |
| ★★ | Q329 | DTC124ES |
| ★★ | Q344, Q345, Q361, Q362 | 2SA1115 |
| ★★ | Q316, Q323, Q324, Q338, Q355 | 2SA933S |
| ★★ | Q335—Q337, Q352—Q354 | 2SA970 |
| ★★ | Q301—Q309, Q311, Q312, Q315, Q317—Q322, Q325—Q328, Q330, Q331, Q339, Q346—Q349, Q356, Q363—365 | 2SC1740S |
| ★★ | Q333, Q334, Q350, Q351 | 2SC2240 |
| ★★ | Q342, Q343, Q359, Q360 | 2SC2603 |
| ★★ | Q340, Q341, Q357, Q358 | 2SD438 |
| ★★ | Q332, Q366 | 2SJ103 |
| ★ | D301—D303, D305—D308 | 1SS131 |

COILS & TRANSFORMERS

| Mark | Symbol & Description | Part No. |
|------|------------------------|----------|
| | L309—L312 Trap coil | ATM-037 |
| | T301, T302 | ATX1001 |
| | Bias OSC transformer | |
| | L313, L314 Inductor | LTA102J |
| | L301, L302, L305, L306 | LTA392J |
| | Inductor | |
| | L303, L304, L307, L308 | LTA472J |
| | Inductor | |

CAPACITORS

| Mark | Symbol & Description | Part No. |
|------|---|--|
| | C416, C428 C307, C308, C325, C326, C343, C344 C303, C304, C442, C443 C414, C415, C426, C427 C301, C302 | ACE-133 CCCSL101J50 CCCSL221J50 CCCSL221K500 CCCSL271J50 |
| | C404 C305, C306, C323, C324 C337, C338, C355, C356, C359, C360 C406, C411 | CCCSL470J50 CEANL100M16 CEASR47M50 CEAS0R1M50 |
| | C350, C423, C435 C313, C314, C331, C332, C347, C348, C351, C352, C375, C376, C399, C400 C309, C310, C327, C328 | CEAS010M50 CEAS100M25 CEAS101M10 |
| | C413, C425, C439, C440 C441 C319, C320, C335, C336 C405, C407—C410 C345, C346 | CEAS2R2M50 CEAS220M16 CEAS471M6 CEAS3R3M50 CEAS330M16 |
| | C349, C361—C364 C373, C374, C395, C396, C421, C422, C433, C434 C385, C386 C321, C322, C341, C342, C377, C378, C397, C398 | CEAS4R7M50 CEAS470M10 CKCVB391K50 CKCYB471K50 |
| | C412, C424, C426, C437 C418, C419, C430, C431 C417, C429 C379, C380 | KCKYF103Z50 CQMA103J50 CQMA103K250 CQMA123J50 |
| | C391, C392, C420, C432 C311, C312, C329, C330, C371, C372, C389, C390 C367—C370, C383, C384 C315, C316, C333, C334, C365, C366, C381, C382 | CQMA153J50 CQMA183J50 CQMA223J50 CQMA273J50 |
| | C387, C388, C393, C394 C401, C402 C317, C318 C353, C354, C357, C358 | CQMA332J50 CQMA473J50 CQMA683J50 CQMA822J50 |

RESISTORS

NOTE: When ordering resistors, convert the resistance value into code form, and then rewrite the part no. as before.

| Mark | Symbol & Description | Part No. |
|------|--|--|
| | R478, R479, R507, R508 R331, R332, R518, R519 R450 | RD1/2PM□□□J RD1/4PMF470J RD1/4PM155J |
| ★ | VR309—VR312 (Semi-fixed) | VRTM6H104 |
| ★ | VR301—VR308 (Semi-fixed) | VRTM6H203 |
| | Other resistors | RD1/8PM□□□J |

MIC Headphone Assembly SEMICONDUCTORS

| Mark | Symbol & Description | Part No. |
|------|----------------------|----------|
| ★★ | IC105 | M5218PF |
| ★★ | Q109, Q110 | 2SC1740S |
| ★ | D103, D104 | 1SS131 |

CAPACITORS

| Mark | Symbol & Description | Part No. |
|------|--------------------------------------|--|
| | C127 C125 C129 C132 C131 | CCCSL101J50 CEANL101M50 CEAS6R8M50 CEJA010M50 CEJA100M25 |
| | C123 C130 C124 C128 C126 | CEJA101M10 CEJA220M16 CEJA470M10 CKCYB471K50 CKCYB681K50 |

RESISTORS

NOTE: When ordering resistors, convert the resistance value into code form, and then rewrite the part no. as before.

| Mark | Symbol & Description | Part No. |
|------|------------------------|--------------|
| ★ | VR102 (Semi-fixed) 10k | ACS-012 |
| Δ | R86, R87 | RD1/2PMF331J |
| Δ | R179 | RD1/4PMF470J |
| | Other resistors | RD1/8PM□□□J |

OTHERS

| Mark | Symbol & Description | Part No. |
|------|----------------------|----------|
| | Jack (MIC) | AKN1004 |
| | Jack (HEADPHONE) | AKN1005 |

Remote Sensor Assembly SEMIDONDUCTORS

| Mark | Symbol & Description | Part No. |
|------|----------------------|----------|
| ★★ | IC106 | CX20106A |
| ★ | D105 | PD49P1 |

CAPACITORS

| Mark | Symbol & Description | Part No. |
|------|------------------------------|---|
| | C133 C134 C136 C135 | CEJA010M50 CEJA010M50 CEJA3R3M50 CKCYB331K50 |

RESISTORS

| Mark | Symbol & Description | Part No. |
|------|----------------------|--|
| | R195 R194 R196 | RN1/4PQ2003F RD1/8PM100J RD1/8PM223J |

OTHERS

| Mark | Symbol & Description | Part No. |
|------|----------------------|----------|
| | Shield plate | ANK1021 |

Tact SW Assembly SEMICONDUCTORS

| Mark | Symbol & Description | Part No. |
|------|------------------------|----------|
| ★ | D601, D602, D604, D605 | AEL1028 |
| ★ | D603, D606, D607 | AEL1029 |

SWITCHES

| Mark | Symbol & Description | Part No. |
|------|---|----------|
| ★★ | S601—S604, S606—S609, S611—S622 Tact switch (1-2 REW, 2-R.PLAY, 1-R.PLAY, 1-REW, 2-PAUSE, 2-1-STOP, 1-PAUSE, 2-FF, 2-F PALY, 1-F PLAY, 1-FF, NORMAL COPY, PARALLEL REC 2, REC MUTE, 2-REC, 1-REC, 1-REC MUTE, HI-SPEED COPY, PL/CD SYNC.) | ASG-711 |

RESISTORS

NOTE: When ordering resistors, convert the resistance value into code form, and then rewrite the part no. as before.

| Mark | Symbol & Description | Part No. |
|------|----------------------|-------------|
| | All resistors | RD1/8PM□□□J |

DOLBY SW Assembly SEMICONDUCTORS

| Mark | Symbol & Description | Part No. |
|------|----------------------|----------|
| ★ | D608 | AEL-460 |
| ★ | D609 | AEL1003 |

SWITCHES

| Mark | Symbol & Description | Part No. |
|------|---|----------|
| ★★ | S623—S630 Tact switch (BALANCE, (L), BALANCE (R), FUNCTION, G, E, REC, VOLUME (+), VOLUME(-), MUTING, RELAY PLAY/REC) | ASG-711 |
| ★★ | S632 Slide switch (REV MODE) | ASH1011 |
| ★★ | S631 Slide switch (DOLBY) | ASH1012 |

RESISTORS

| Mark | Symbol & Description | Part No. |
|------|----------------------|-------------|
| | R608, R609 | RD1/4PM□□□J |
| | Other resistors | RD1/8PM□□□J |

DOLBY B/C Assembly SEMICONDUCTORS

| Mark | Symbol & Description | Part No. |
|------|----------------------|----------|
| ★★ | IC541 | CX20187 |

FILTERS & COILS

| Mark | Symbol & Description | Part No. |
|------|-------------------------|----------|
| | F541, F542 DOLBY filter | ATF1014 |
| | L543, L544 Inductor | ATH1017 |
| | L541, L542 Inductor | ATH1018 |

CAPACITORS

| Mark | Symbol & Description | Part No. |
|------|----------------------|-------------|
| | C535, C536 | CCCSL221J50 |
| | C517, C518 | CEASR47M50 |
| | C533, C543 | CEAS100M25 |
| | C501, C502 | CEAS101M10 |
| | C509, C510 | CEAS2R2M50 |
| | C507, C508 | CEYA100M16 |
| | C505, C506 | CEYA2R2M50 |
| | C511, C512 | CKCYB551K50 |
| | C503, C504 | CKCYF223Z50 |
| | C531, C532 | CQMA103J50 |
| | C521, C522 | CQMA153J50 |
| | C519, C520 | CQMA154J50 |
| | C523, C524 | CQMA224J50 |
| | C513, C514 | CQMA302J50 |
| | C515, C516 | CQMA472J50 |
| | C527, C528 | CQMA473J50 |
| | C529, C530 | CQMA682J50 |
| | C525, C526 | CQMA683J50 |

RESISTORS

NOTE: When ordering resistors, convert the resistance value into code form, and then rewrite the part no. as before.

| Mark | Symbol & Description | Part No. |
|------|----------------------|-------------|
| | All resistors | RD1/8PN□□□J |

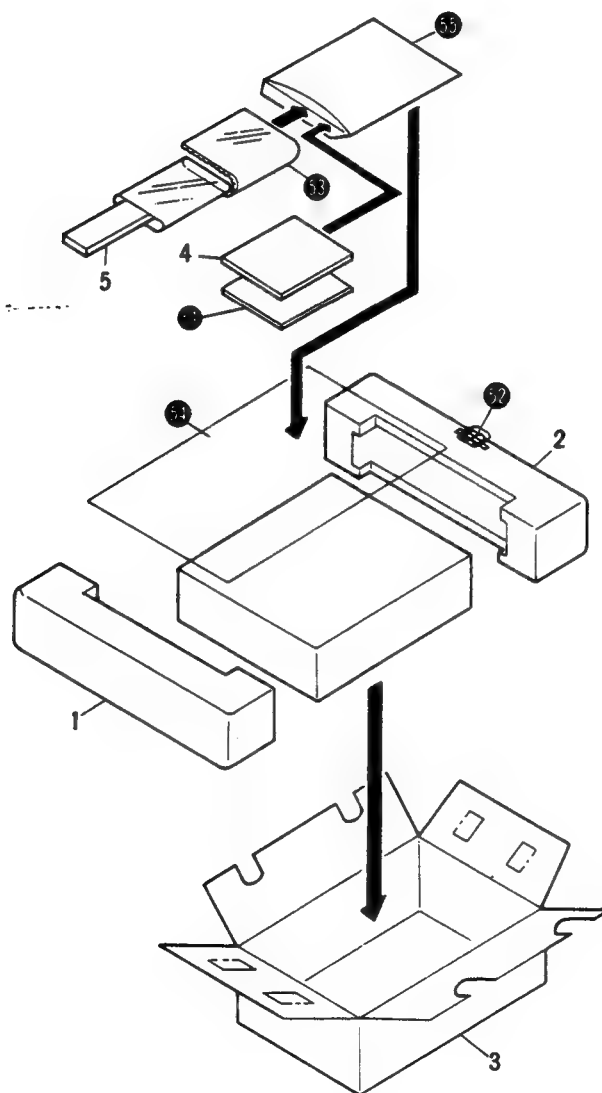
Fuse Assembly CAPACITOR

| Mark | Symbol & Description | Part No. |
|------|----------------------|----------|
| △ | C138 (0.01μF/AC400V) | ACG1002 |

5. PACKING

Parts List

| Mark | No. | Part No. | Description |
|------|-----|----------|---|
| | 1 | AHA1038 | Front pad |
| | 2 | AHA1039 | Rear pad |
| | 3 | AHD1170 | Packing case |
| | 4 | ARE1040 | Operating instructions (English/German/French/ Italian) |
| | 5 | AXD1016 | Remote control unit |
| | 51 | | Warranty card |
| | 52 | | Battery assembly |
| | 53 | | Air cap |
| | 54 | | Packing sheet |
| | 55 | | Envelope |



6. FOR HB AND SD TYPES

CONTRAST OF MISCELLANEOUS PARTS

The DC-X99Z/HB and SD types are the same as the DC-X99Z/HE type with the exception of the following sections.

| Mark | Symbol & Description | Part No. | | | Remarks |
|------|---|------------|------------|--------------|---------|
| | | DC-X99Z | | | |
| | | HE type | HB type | SD type | |
| △ ⊙ | Power μCOM Assembly | AWZ1306 | AWZ1306 | AWZ1331 | |
| △ | Fuse Assembly | Non supply | Non supply | Non supply | |
| △ | AC power cord | ADG-041 | ADG-051 | ADG1015 | |
| △ | Strain relief | AEC-882 | AEC-882 | ..... |  |
| △ | AC socket (AC OUTLET) | AKP-502 | AKP-505 | AKP-515 | |
| △ ★★ | MIC headphone assembly | Non supply | Non supply | Non supply | |
| △ ★★ | F1 Fuse (T1A/250V) | AEK-402 | AEK-508 | ..... |  |
| △ ★★ | F1 Fuse (T1.6A/250V) | ..... | ..... | AEK-405 | |
| △ ★★ | F2 Fuse (T2A/250V) | AEK-017 | AEK-511 | AEK-017 | |
| △ ★★ | F3 Fuse (T2.5A/250V) | AEK-403 | AEK-512 | ..... |  |
| △ ★★ | F3 Fuse (T1.6A/250V) | ..... | ..... | AEK-405 | |
| △ ★ | T1 Power transformer (AC220/240V) | ATS1058 | ATS1058 | ..... |  |
| △ ★ | T1 Power transformer (AC110/120-127/220/240V) | ..... | ..... | ATS1057 | |
| △ ★★ | S2 Voltage selector (AC110/120-127/220/240V) | ..... | ..... | AKX-507 | |
| △ ★★ | S3 Voltage selector (AC110/120-127/220/240V) | ..... | ..... | AKX1007 | |
| | Screw | ..... | ..... | VBZ30P100FMC | |
| | Cushion rubber | ..... | ..... | AEB1003 | |
| | Operating instructions (English, German, French, Italian) | ARE1040 | ..... | ..... |  |
| | Operating instructions (English) | ..... | ARB1049 | ARB1055 | |
| | Operating instructions (Spanish-auxiliary) | ..... | ..... | ARC1030 | |
| | Rear panel | Non supply | Non supply | Non supply | |
| | Heat sink | ..... | ..... | Non supply | |
| | Heat-sink holder | ..... | ..... | Non supply | |

POWER μ COM ASSEMBLY (AWZ1331)

The power μ COM assembly (AWZ1331) is the same as the power μ COM assembly (AWZ1306) with the exception of the following sections.

| Mark | Symbol & Description | Part No. | | Remarks |
|------|----------------------|------------------------|--------------------|---------|
| | | AWZ1306 HE/HB types | AWZ1331 SD type | |
| △ ★★ | IC3 | STK4141-2S | STK4191-5S | |
| △ | R90 | RD1/2PMF4R7J | RD/1/2PMF100J | |
| | R55, R56 | RD1/8PM102J | RD1/8PM911J | |
| △ | R85 | RS2LMF471J | RS2LMF911J | |
| △ | C8, C9 | ACH-291 | ACH-258 | |
| △ ★ | T2 | ATT1037 | ATT1036 | |
| △ ★★ | RY2 | ASR-111 | ASR-109 | |
| | | (ASR1005) | (ASR-112) | |
| | C49, C50 | ..... | CCCSL010C50 | |

FUSE ASSEMBLY

The fuse assembly for SD type is the same as the fuse assembly for HE/HB types with the exception of the following sections.

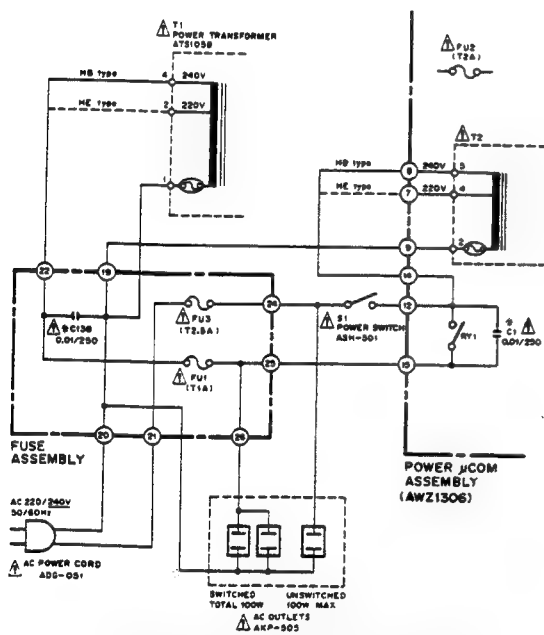
| Mark | Symbol & Description | Part No. | | Remarks |
|------|----------------------|-------------|---------|---------|
| | | HE/HB types | SD type | |
| | Terminal | Non supply | ..... |  |

MIC HEADPHONE ASSEMBLY

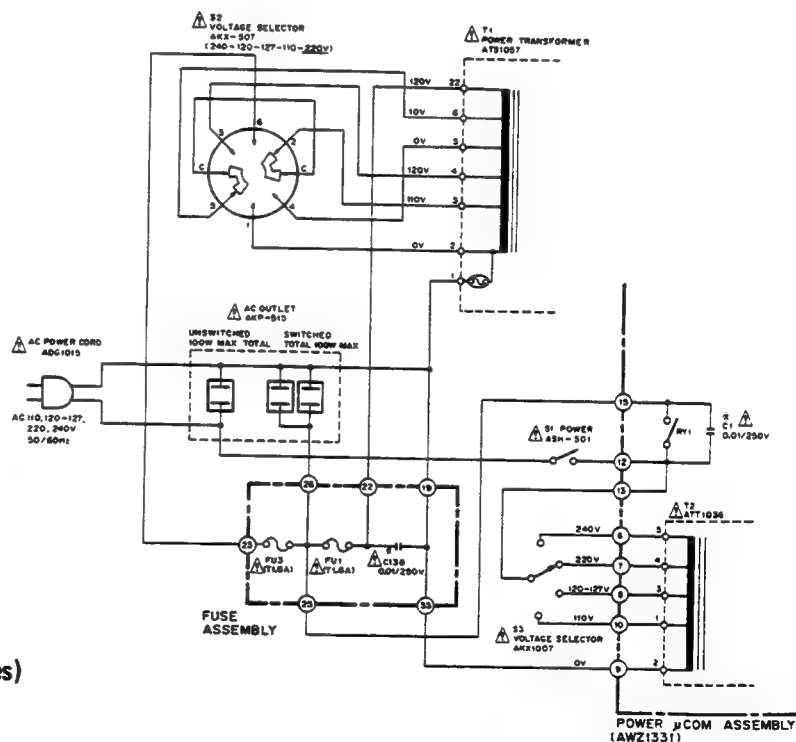
The MIC headphone assembly for SD type is the same as the MIC headphone assembly for HE/HB types with the exception of the following sections.

| Mark | Symbol & Description | Part No. | | Remarks |
|--------|----------------------|-----------------------|------------------------------|---------|
| | | HE/HB types | SD type | |
| △ △ | R86, R87 R88, R89 | RD1/2PMF331J | RD1/2PMF681J RD1/2PMF681J | |

Schematic Diagram of HB type



Schematic Diagram of SD type



Line Voltage Selection (For HE and HB types)

Line voltage can be changed with following steps.

1. Disconnect the AC Power cord.
2. Remove the Bonnet case.
3. Change the connection of the primary lead wires.
(Connect as shown in Fig. above (left).)
4. Stick the line voltage label on the rear panel.

| Description | Part No. |
|-------------|----------|
| 220V label | AAX-193 |
| 240V label | AAX-192 |

7. ADJUSTMENTS

7.1 MECHANICAL SECTION ADJUSTMENT

| 1. Tape speed adjustment (Normal-speed adjustment after double-speed adjustment is performed.) | | | |
|---|---|----------------------|---|
| Mode | Test tape | Adjusting points | Specifications/Ratings (playback frequency) |
| PLAY | Play back 3kHz section of STD-301 (DECK-I) | VR253 (double speed) | Adjust so that it becomes 6030Hz. (Short-circuit TP27 and TP29 after playback.) |
| | | VR251 (normal speed) | Adjust so that it becomes 3015Hz. (Press the PLAY switch.) |
| | Play back 3kHz section of STD-301 (DECK-II) | VR254 (double speed) | Adjust so that it becomes 6030Hz. (Short-circuit TP28 and TP29 after playback.) |
| | | VR252 (normal speed) | Adjust so that it becomes 3015Hz. (Press the PLAY switch.) |
| 2. Tape path adjustment | | | |
| Mode | Adjusting points | | Specifications |
| FWD | FWD azimuth adjustment screw | | Playback 10kHz, -20dB with STD-331 test tape. Adjust so that the signal output at test points of TP501 and TP502 becomes maximum. |
| REV | REV azimuth adjustment screw | | |
| Load the cassette, then lift the head base with your hand so that tape contacts the tape guide. | | | |
| STOP | Height adjustment screws (left and right) | | Visually check whether tape is on tape guide center. |
| FWD PLAY | FWD height adjustment screw | | Adjust primary tape guide so that tape is not curled. |
| REV PLAY | REV height adjustment screw | | |

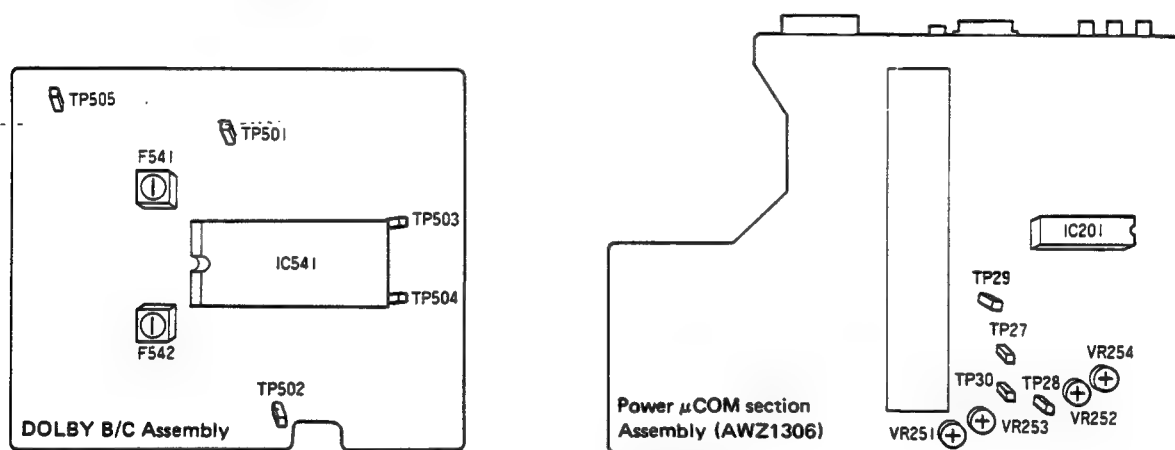


Fig. 7-1 Tape speed adjustment

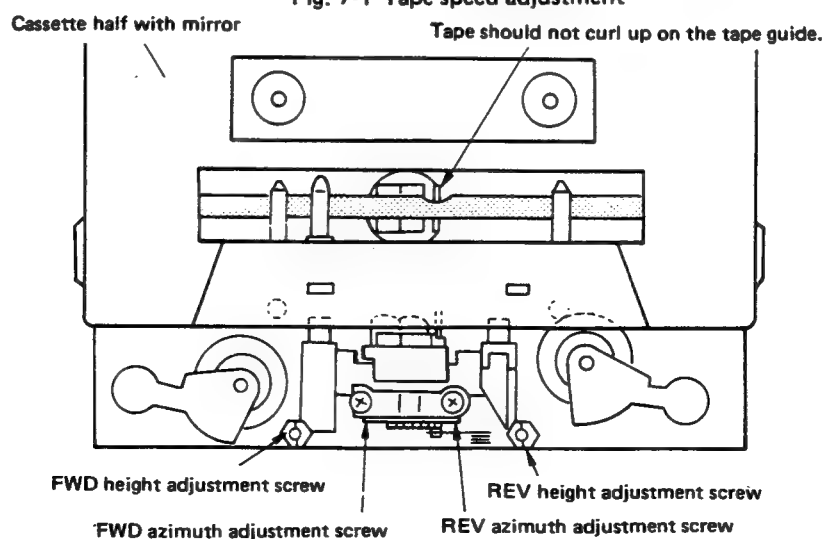


Fig. 7-2 Tape path adjustment

7.2 ELECTRICAL ADJUSTMENT

Adjustment Conditions

1. Mechanism section adjustment should have been completed first.
2. Heads should be cleaned and demagnetized.
3. Aging of deck should be performed for at least 2–3 minutes before starting electrical adjustment.
4. Reference signal should be set to 0dB=1Vrms.
5. The following switch setting should not be changed, unless otherwise indicated:
DOLBY NR: OFF

Test Tapes

STD-331B: Playback adjustment (See Fig. 7-3.)

STD-608A: Blank normal tape

STD-620: Blank chrome tape

STD-610: Blank metal tape

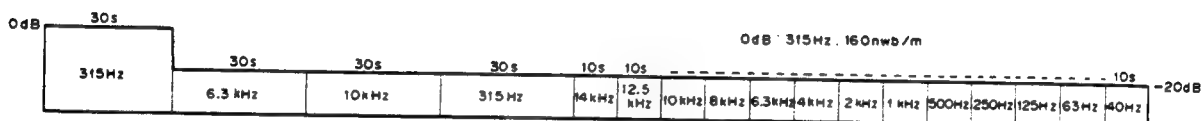


Fig. 7-3 STD-331B test tape

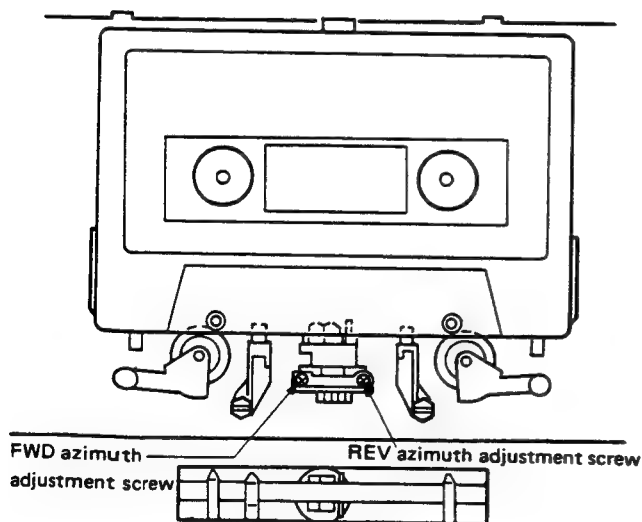


Fig. 7-4 Head azimuth adjustment

Deck I

1. Head angle adjustment
2. Playback level adjustment
3. Recording/playback frequency characteristics adjustment
4. Recording level adjustment

Deck II

1. Head angle adjustment
2. Playback level adjustment
3. Recording/playback frequency characteristics adjustment
4. Recording level adjustment

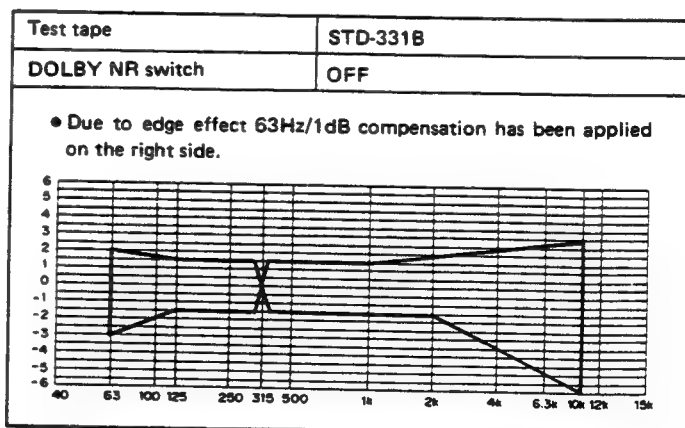


Fig. 7-5 Playback frequency-response allowance range

| | | | | | | | |
|--|----------|--|---|--|-----------------------|---|--|
| • Deck I adjustment • This unit incorporates auto tape selector. | | | | | | | |
| 1. Head angle adjustment • Turn VR301 and VR302 (playback level adjustment VRs) fully clockwise (MAX. position). | | | | | | | |
| Tape selector | Mode | Input signal/test tape | | Adjusting point | Measuring points | Adjusting value | Remarks |
| NORM | PLAY | Play back 10kHz, -20dB with STD-331B test tape | | Head angle adjustment screw (Fig. 7-4) | TP501 (L) TP502(R) | Maximum playback signal level | Lock screw after completion of adjustment. |
| 2. Playback level adjustment • This adjustment is set Dolby level during playback, so the adjustment should be performed carefully. | | | | | | | |
| Tape selector | Mode | Input signal/test tape | | Adjusting point | Measuring points | Adjusting value | Remarks |
| NORM | PLAY | Play back 315Hz, 0dB with test tape STD-331B | | VR301 (L) VR302(R) | TP501 (L) TP502(R) | -10.2dBV (309mV) | |
| 3. Recording/Playback frequency characteristics adjustment • This adjustment is set to recording bias, so care should be taken to avoid distortion factor deterioration due to under-bias operation. | | | | | | | |
| Tape selector | Mode | Input signal/test tape | | Adjusting point | Measuring points | Adjusting value | Remarks |
| NORM | REC | Input 315Hz signal to VIDEO terminal. | 1 | Input signal level | TP501 (L) TP502(R) | -30.2dBV (31mV) | Set recording level VR to center position. |
| NORM | REC/PLAY | Record and play back 315Hz, 10kHz with STD-608A test tape | 2 | VR309 (L) VR310(R) | TP501 (L) TP502(R) | Record and play back repeatedly, making corrections so as to obtain a 0 ± 0.5 dB 10kHz playback level of the recorded 315Hz signal. | |
| • Select test tape/DOLBY NR switch, and frequency characteristics zone shown in Fig. 7-7 should be satisfied. | | | | | | | |
| 4. Recording level adjustment | | | | | | | |
| Tape selector | Mode | Input signal/test tape | | Adjusting point | Measuring points | Adjusting value | Remarks |
| NORM | REC | Input 315Hz signal to VIDEO terminal | 1 | Input signal level | TP501 (L) TP502(R) | -10.2dBV (309mV) | |
| NORM | REC/PLAY | Perform recording and playback of 315Hz to STD-608A test tape | 2 | VR305 (L) VR306(R) | TP501 (L) TP502(R) | Record and playback repeatedly, making corrections so that playback level of the 315Hz signal is -10.2dBV (309mV). | |
| METAL | REC/PLAY | Perform recording and playback of 315Hz to STD-610 test tape | 3 | | TP501 (L) TP502(R) | Confirm that playback level of the 315Hz signal is -10.2dBV ± 2 dB. | |
| • Deck II adjustment • This unit incorporates auto tape selector. | | | | | | | |
| 1. Head angle adjustment • Turn VR303 and VR304 (playback level adjustment VRs) fully clockwise (MAX. position). | | | | | | | |
| Tape selector | Mode | Input signal/test tape | | Adjusting points | Measuring points | Adjustment value | Remarks |
| NORM | PLAY | Playback 10kHz, -20dB with STD-331B test tape | | Head angle adjustment screw (Fig. 7-4) | TP501 (L) TP502(R) | Maximum playback signal level | Lock screw after completion of adjustment |
| 2. Playback level adjustment • This adjustment sets Dolby level during playback, so should be performed carefully. | | | | | | | |
| Tape selector | Mode | Input signal/test tape | | Adjusting points | Measuring points | Adjustment value | Remarks |
| NORM | PLAY | Playback 315Hz, 0dB with STD-331B test tape | | VR303 (L) VR304(R) | TP501 (L) TP502(R) | -10.2dBV (309mV) | |
| 3. Recording/Playback frequency characteristics adjustment • This adjustment is set to recording bias, so care should be taken to avoid distortion factor deterioration due to under-bias operation. | | | | | | | |
| Tape selector | Mode | Input signal/test tape | | Adjusting points | Measuring points | Adjustment value | Remarks |
| NORM | REC | Input 315Hz signal to VIDEO terminal | 1 | Input signal level | TP501 (L) TP502(R) | -30.2dBV (31mV) | Set recording level VR to center position. |
| NORM | REC/PLAY | Record (315Hz) and playback 315Hz, 10kHz to STD-608A test tape | 2 | VR311 (L) VR312(R) | TP501 (L) TP502(R) | Record and playback repeatedly, making corrections so as to obtain 0 ± 0.5 dB 10kHz playback level of the recorded 315Hz signal. | |
| • Select test tape, DOLBY NR switch and frequency characteristics zone shown in Fig. 7-7 should be satisfied. | | | | | | | |

4. Recording level adjustment

| Tape selector | Mode | Input signal/test tape | | Adjusting points | Measuring points | Adjustment value | Remarks |
|---------------|----------|---|---|----------------------|-----------------------|--|---------|
| NORM | REC | Input 315Hz signal to VIDEO terminal | 1 | Input signal level | TP501 (L) TP502(R) | -10.2dBV (309mV) | |
| NORM | REC/PLAY | Perform recording and playback of 315Hz of STD-608A test tape | 2 | VR307(L) VR308(R) | TP501 (L) TP502(R) | Record and playback repeatedly, making corrections so that the playback of 315Hz signal is -10.2dBV (309mV). | |
| METAL | REC/PLAY | Perform recording and playback of 315Hz to STD-610 test tape | 3 | | TP501 (L) TP502(L) | Confirm that playback level of the 315Hz signal is -10.2dBV \pm 2dB. | |

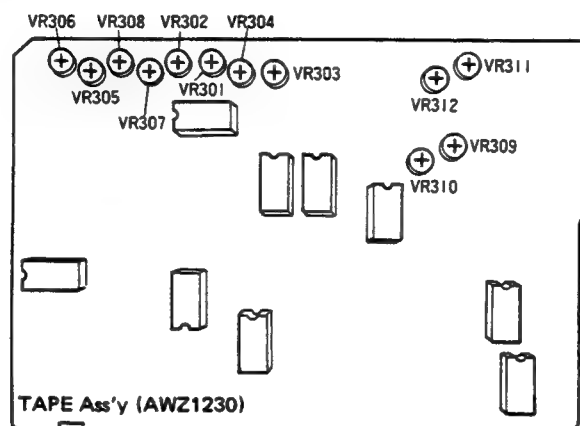


Fig. 7-6 Deck I, Deck II adjustment

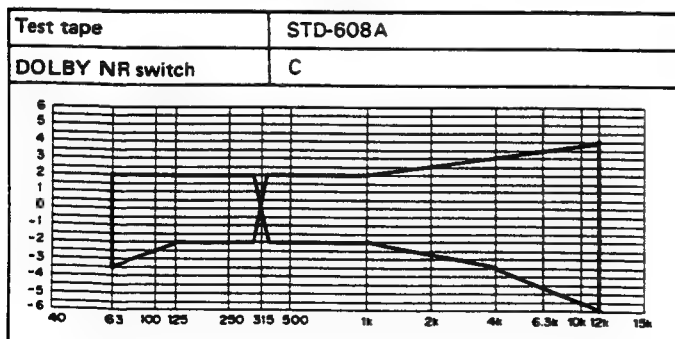
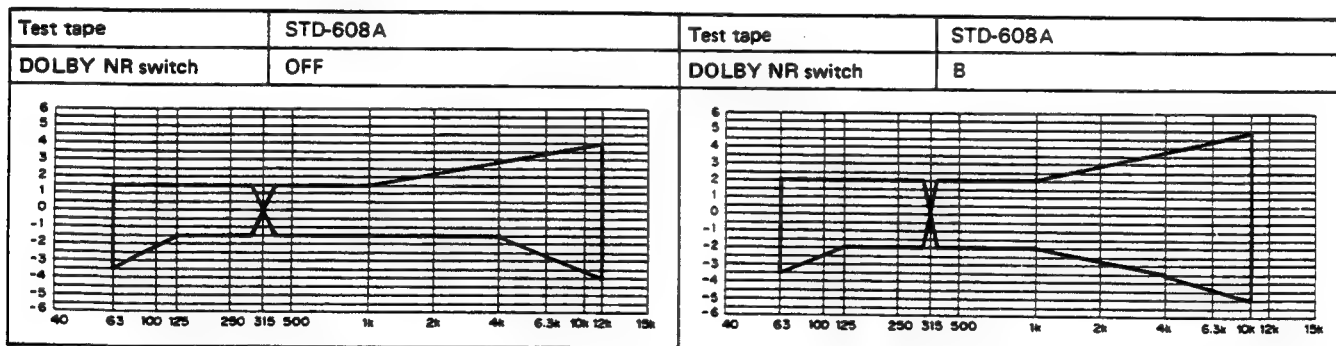


Fig. 7-7-1 Recording/Playback frequency-response allowance range (NORM)

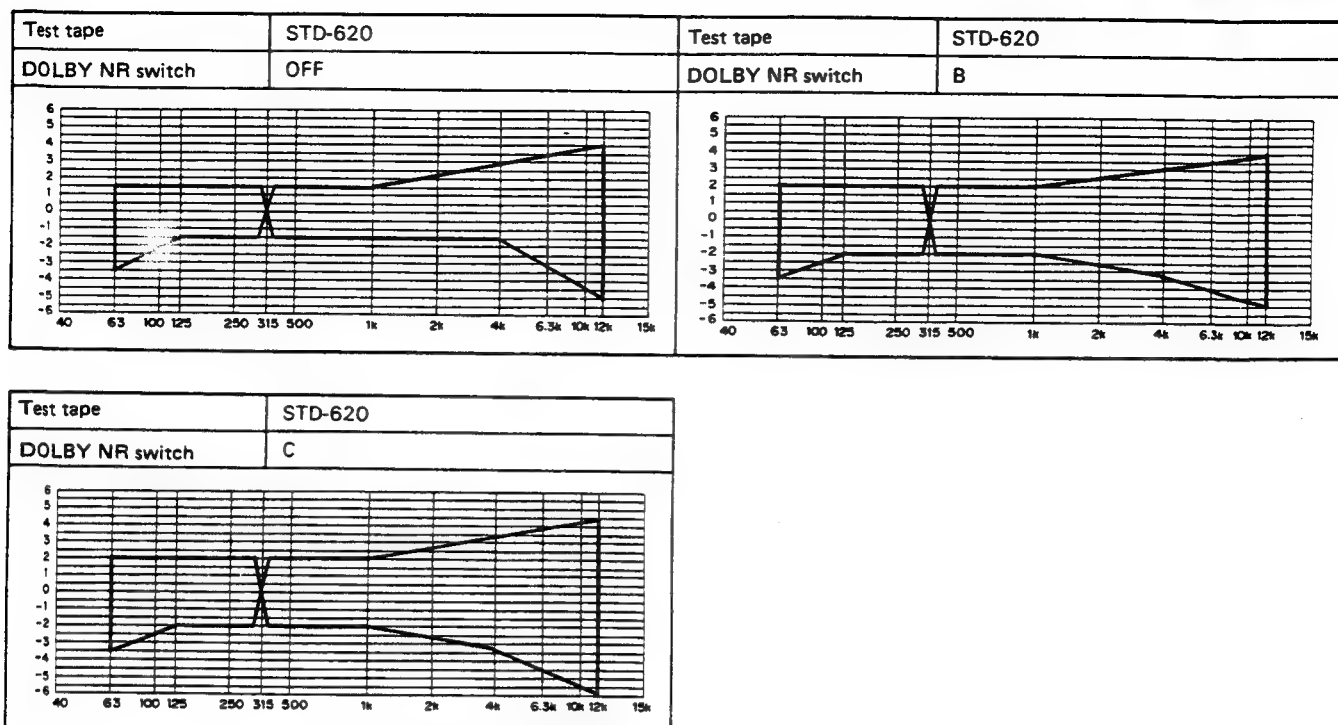
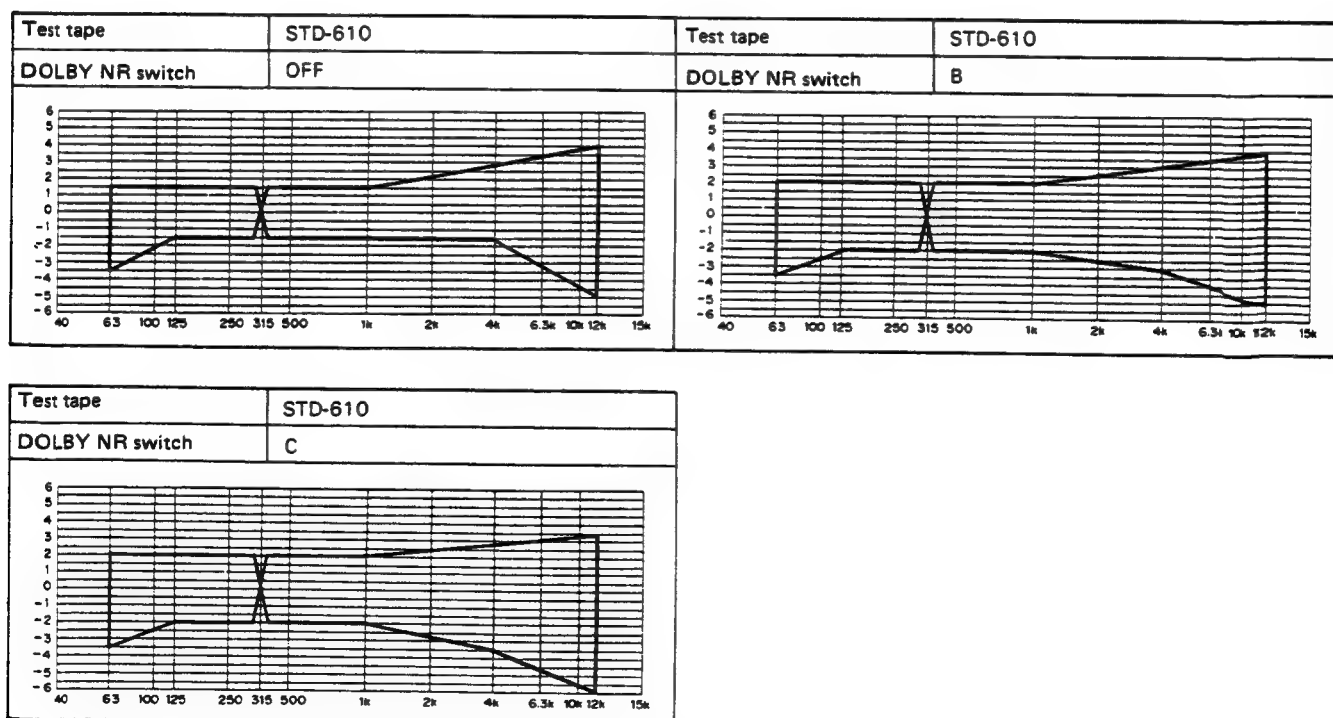
Fig. 7-7-2 Recording/Playback frequency-response allowance range (CrO₂)

Fig. 7-7-3 Recording/Playback frequency-response allowance range (METAL)

7. RÉGLAGE

7.1 PROCEDURES DE RÉGLAGE

| 1. Réglage de la vitesse de défilement de la bande (effectuer le réglage de la vitesse double avant le réglage de la vitesse normale) | | | |
|---|--|-------------------------|---|
| Mode | Bande test | Points de réglage | Spécifications/valeurs (fréquence de lecture) |
| PLAY | Section 3 kHz de la bande STD-301 (Platine I) | VR253 (vitesse double) | Régler sur 6030 Hz (court-circuiter TP27 et TP29 après la lecture) |
| | | VR251 (vitesse normale) | Régler sur 3015 Hz (appuyer sur la touche PLAY) |
| | Section 3 kHz de la bande STD-301 (Platine II) | VR254 (vitesse double) | Régler sur 6030 Hz (court-circuiter TP28 et TP29 après la lecture) |
| | | VR252 (vitesse normale) | Régler sur 3015 Hz (appuyer sur la touche PLAY) |
| 2. Réglage du parcours de la bande | | | |
| Mode | Points de réglage | | Spécifications |
| FWD | Vis de réglage de l'azimuth lors de l'avance rapide | | Lecture d'une tonalité de 10 kHz à -20 dB en utilisant la bande test STD-331. |
| REV | Vis de réglage de l'azimuth lors du rebobinage | | Régler pour obtenir un niveau de sortie maximum sur les points test TP501 et TP502. |
| Mettre en place une cassette, soulever ensuite la bass de la tête avec le doigt de manière à ce que la bande entre en contact avec le guide de bande. | | | |
| STOP | Vis de réglage de hauteur (gauche et droit) | | Vérifier visuellement que la bande se trouve au centre du guide de bande. |
| FWD PLAY | Vis de réglage de la hauteur lors de l'avance rapide | | Régler le guide bande primaire de manière à ce que la bande n'ondule pas. |
| REV PLAY | Vis de réglage de la hauteur lors du rebobinage | | |

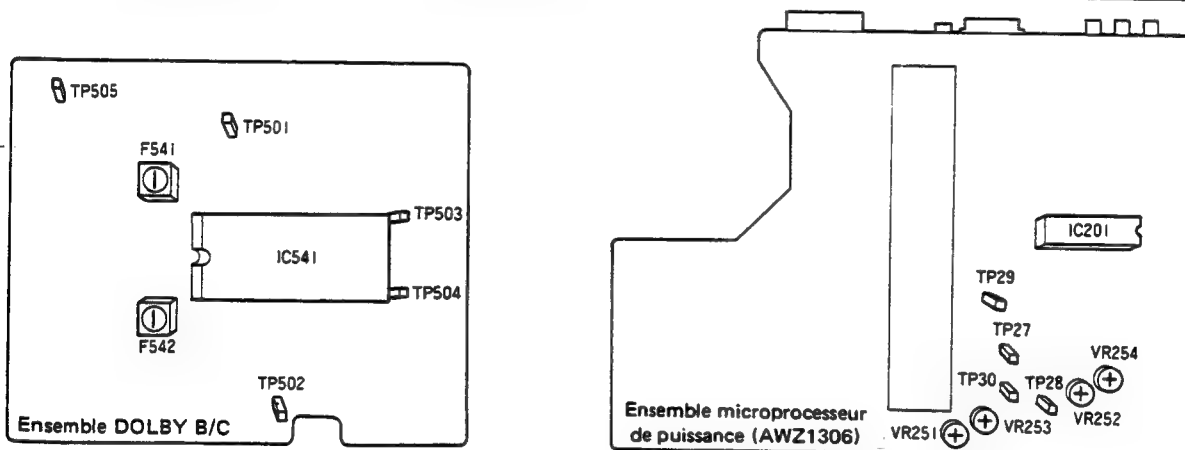


Fig. 7-1 Réglage de la vitesse de défilement de la bande

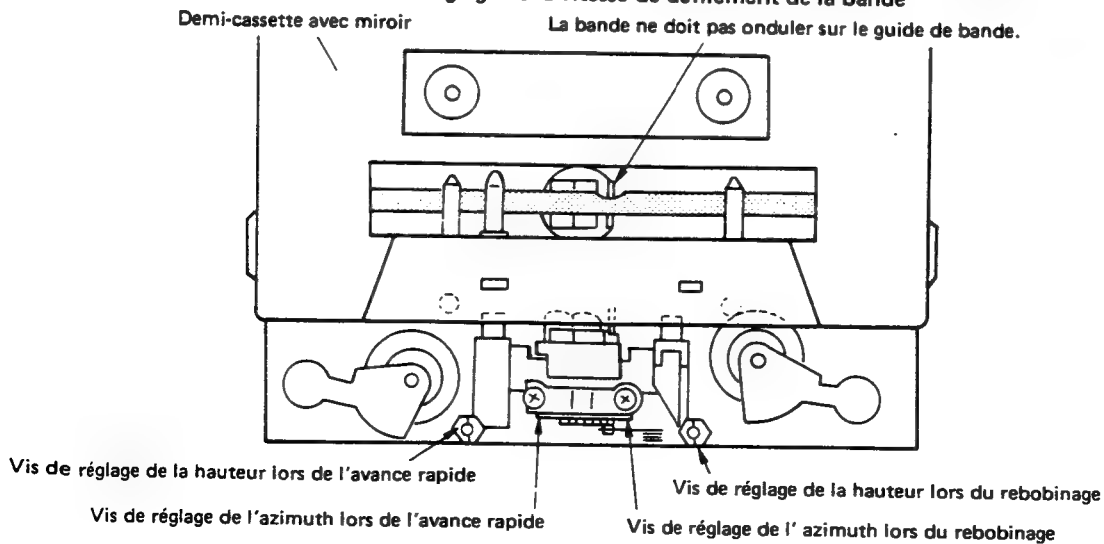


Fig. 7-2 Réglage du parcours de la bande

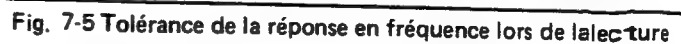
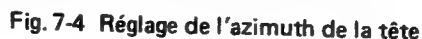
Conditions de réglage

- DOLBY NR:** sur la position OFF

STD-331B: Réglage de la lecture (se reporter à la Fig. 7-3)
 STD-608A: Bande vierge de type normal
 STD-620: Bande vierge de type chrome
 STD-610: Bande vierge de type métal

1. Réglage de l'inclinaison de la tête
2. Réglage du niveau de lecture
3. Réglage de la fréquence d'enregistrement/lecture
4. Réglage du niveau d'enregistrement

1. Réglage de l'inclinaison de la tête
2. Réglage du niveau de lecture
3. Réglage de la fréquence d'enregistrement/lecture
4. Réglage du niveau d'enregistrement



• Réglage de la platine I

• Cet appareil est équipé d'un sélecteur automatique de type de bande.

1. Réglage de l'inclinaison de la tête

- Tourner VR301 et VR302 (résistances variables de réglage du niveau de lecture) à fond dans le sens des aiguilles d'une montre (position MAX.).

| Sélecteur de type de bande | Mode | Signal d'entrée/ bande test | Points de réglage | Points de mesure | Valeur de réglage | Remarques |
|----------------------------|------|-----------------------------------|---|-----------------------|-------------------------------------|-------------------------------|
| NORM | PLAY | 10 kHz, -20 dB (lecture)/STD-331B | Vis de réglage de l'inclinaison de la tête (Fig. 7-4) | TP501 (L) TP502(R) | Niveau maximum du signal de lecture | Bloquer la vis après réglage. |

2. Réglage du niveau de lecture

- Ce réglage agit sur le niveau de lecture Dolby et doit donc être effectué avec soin.

| Sélecteur de type de bande | Mode | Signal d'entrée/ bande test | Points de réglage | Points de mesure | Valeur de réglage | Remarques |
|----------------------------|------|----------------------------------|-----------------------|-----------------------|---------------------|-----------|
| NORM | PLAY | 315 kHz, 0 dB (lecture)/STD-331B | VR301 (L) VR302(R) | TP501 (L) TP502(R) | -10,2dBV (309mV) | |

3. Réglage de la fréquence d'enregistrement/lecture

- Ce réglage agit sur la polarisation pour enregistrement et doit donc être effectué avec soin pour éviter la distorsion provoquée lors du fonctionnement avec polarisation trop faible.

| fonctionnement avec polarisation trop faible. | | | | | | | |
|---|----------|---|---|---------------------------|-----------------------|---|---|
| Sélecteur de type de bande | Mode | Signal d'entrée/ bande test | | Points de réglage | Points de mesure | Valeur de réglage | Remarques |
| NORM | REC | 315 kHz sur la prise VIDEO | 1 | Niveau du signal d'entrée | TP501 (L) TP502(R) | -30,2dBV (31mV) | Placer la résistance ajustable de réglage du niveau d'enregistrement en position médiane. |
| NORM | REC/PLAY | 315 Hz (enregistrement) et 10 kHz (lecture)/ STD-608A | 2 | VR309 (L) VR310(R) | TP501 (L) TP502(R) | Enregistrer et effectuer la lecture de façon répétée, en faisant de corrections de manière à ce que le niveau de lecture soit de 0 ± 0,5 dB à 10 kHz correspondant au signal de 315 Hz enregistré | |

- Les courbes de fréquence de la Fig. 7-7 doivent être atteintes pour chaque combinaison de bande test/position du commutateur DOLBY NR.

4. Réglage du niveau d'enregistrement

| Sélecteur de type de bande | Mode | Signal d'entrés/ bande test | | Points de réglage | Points de mesure | Valeur de réglage | Remarques |
|----------------------------|----------|--|---|---------------------------|-----------------------|--|-----------|
| NORM | REC | 315 kHz sur la prise VIDEO | 1 | Niveau du signal d'entrée | TP501 (L) TP502(R) | -10,2dBV (309mV) | |
| NORM | REC/PLAY | 315 Hz (enregistrement & lecture)/STD-608A | 2 | VR305 (L) VR306(R) | TP501 (L) TP502(R) | Enregistrer et effectuer la lecture de façon répétée, en effectuant des corrections de manière à ce que le niveau de lecture soit de -10,2dBV (309mV) pour le signal 315 Hz. | |
| METAL | REC/PLAY | 315 Hz (enregistrement & lecture)/STD610 | 3 | | TP501 (L) TP502(R) | Vérifier que le niveau de lecture du signal de 315 Hz est de -10,2 dBV b 2 dB. | |

• Réglage de la platine II

• Cet appareil est équipé d'un sélecteur automatique de type de bande.

1. Réglage de l'inclinaison de la tête

- Tourner VR303 et VR304 (résistances variables de réglage du niveau de lecture) à fond dans le sens des aiguilles d'une montre (position MAX.).

| Sélecteur de type de bande | Mode | Signal d'entrée/ bande test | Points de réglage | Points de mesure | Valeur de réglage | Remarques |
|----------------------------|------|-----------------------------------|---|-----------------------|-------------------------------------|-------------------------------|
| NORM | PLAY | 10 kHz, -20 dB (lecture)/STD-331B | Vis de réglage de l'inclinaison de la tête (Fig. 7-4) | TP501 (L) TP502(R) | Niveau maximum du signal de lecture | Bloquer la vis après réglage. |

2. Réglage du niveau de lecture

- Ce réglage agit sur le niveau de lecture Dolby et doit donc être effectué avec soin.

| Sélecteur de type de bande | Mode | Signal d'entrée/ bande test | Points de réglage | Points de mesure | Valeur de réglage | Remarques |
|----------------------------|------|----------------------------------|-----------------------|-----------------------|---------------------|-----------|
| NORM | PLAY | 315 kHz, 0 dB (lecture)/STD-331B | VR303 (L) VR304(R) | TP501 (L) TP502(R) | -10,2dBV (309mV) | |

3. Réglage de la fréquence d'enregistrement/lecture

- Ce réglage agit sur la polarisation pour enregistrement et doit donc être effectué avec soin pour éviter la distorsion provoquée lors du fonctionnement avec polarisation trop faible.

| Sélecteur de type de bande | Mode | Signal d'entrée/ bande test | Points de réglage | Points de mesure | Valeur de réglage | Remarques |
|----------------------------|----------|--|-----------------------------|-----------------------|--------------------|---|
| NORM | REC | 315 kHz sur la prise VIDEO | 1 Niveau du signal d'entrée | TP501 (L) TP502(R) | -30,2dBV (31mV) | Placer la résistance ajustable de réglage du niveau d'enregistrement en position médiane. |
| NORM | REC/PLAY | 315 Hz (enregistrement) et 10 kHz (lecture)/ STD-608A | 2 VR311 (L) VR312(R) | TP501 (L) TP502(R) | | Enregistrer et effectuer la lecture de façon répétée, en faisant des corrections de manière à ce que le niveau de lecture soit de $0 \pm 0,5$ dB à 10 kHz correspondant au signal de 315 Hz enregistré. |

• Les courbes de fréquence de la Fig. 7-7 doivent être atteintes pour chaque combinaison de bande test/position du commutateur DOLBY NR.

4. Réglage du niveau d'enregistrement

| Sélecteur de type de bande | Mode | Signal d'entrée/ bande test | Points de réglage | Points de mesure | Valeur de réglage | Remarques |
|----------------------------|----------|--|-----------------------------|-----------------------|---------------------|--|
| NORM | REC | 315 kHz sur la prise VIDEO | 1 Niveau de signal d'entrée | TP501 (L) TP502(R) | -10,2dBV (309mV) | |
| NORM | REC/PLAY | 315 Hz (enregistrement & lecture)/STD-608A | 2 VR307 (L) VR308(R) | TP501 (L) TP502(R) | | Enregistrer et effectuer la lecture de façon répétée, en effectuant des corrections de manière à ce que le niveau de lecture soit de -10,2dBV (309mV) pour le signal 315 Hz. |
| METAL | REC/PLAY | 315 Hz (enregistrement & lecture)/STD-610 | 3 | TP501 (L) TP502(R) | | Vérifier que le niveau de lecture du signal de 315 Hz est de -10,2 dBV ± 2 dB. |

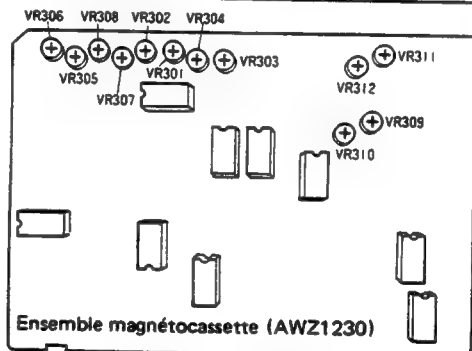


Fig. 7-6 Réglage de la platine I, platine II

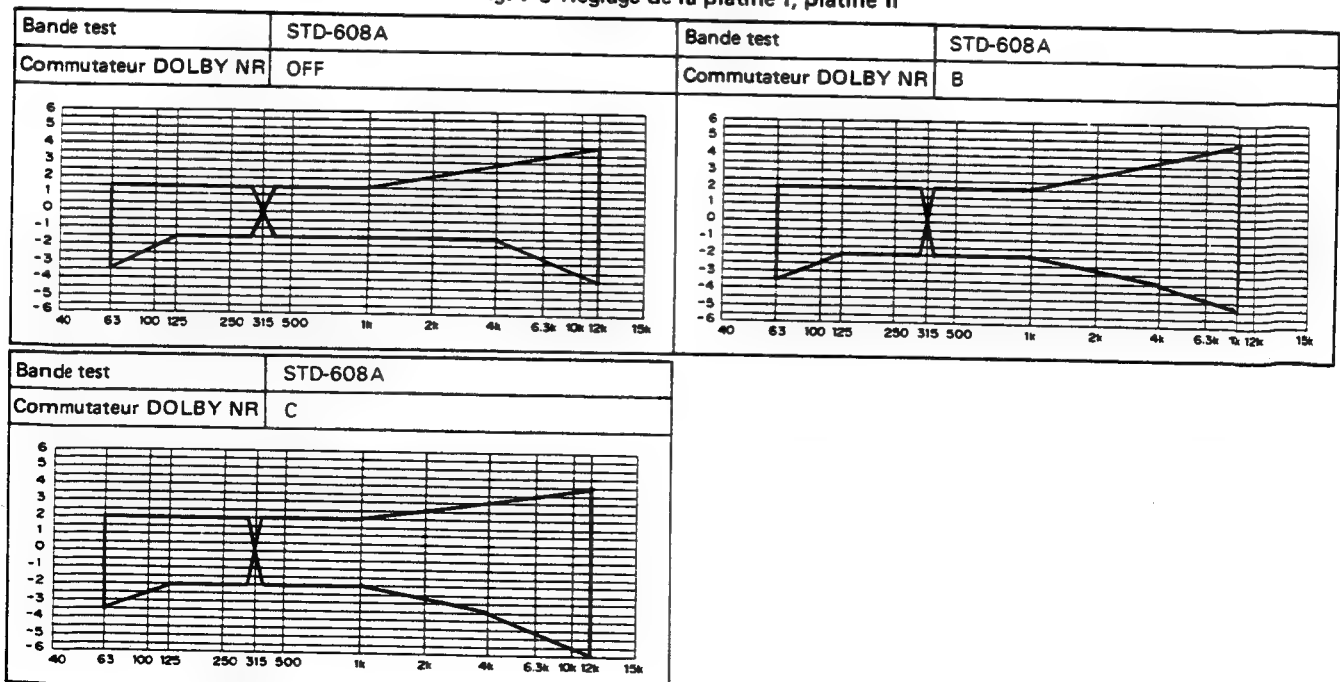


Fig. 7-7-1 Tolérance de la réponse en fréquence d'enregistrement/lecture (NORM)

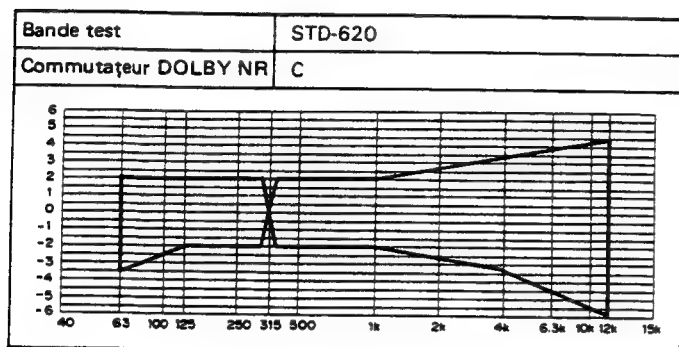
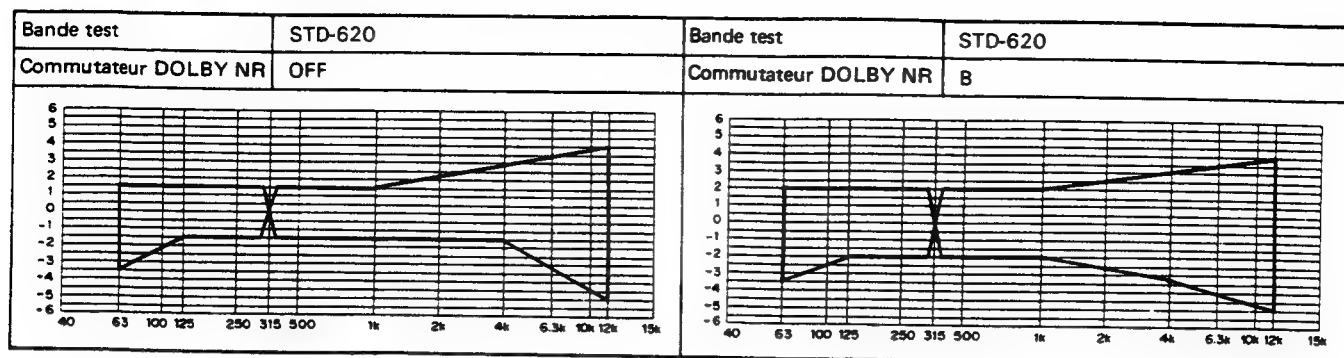


Fig. 7-7-2 Tolérance de la réponse en fréquence d'enregistrement/lecture (CrO₂)

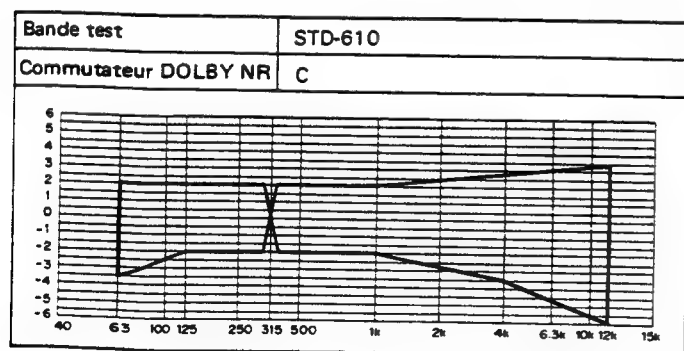
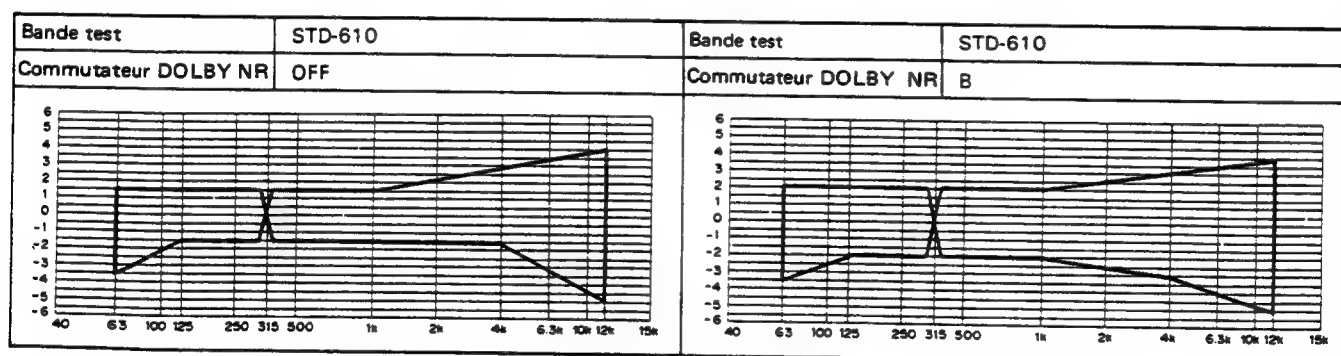


Fig. 7-7-3 Tolérance de la réponse en fréquence d'enregistrement/lecture (METAL)

7. AJUSTE

7.1 PROCEDIMIENTOS DE AJUSTE

| 1. Ajuste de velocidad de cinta (realizar el ajuste de velocidad doble antes que el de velocidad normal) | | | |
|---|---|-----------------------------|--|
| Modo | Cinta de prueba | Puntos de ajuste | Especificaciones/Valores nominales (frecuencia de reproducción) |
| PLAY | Sección de 3kHz del STD-301 (platina I) | VR253 (velocidad doble) | Ajustar a 6030 Hz (cortocircuitar TP27 y TP29 después de la reproducción). |
| | | VR251 (velocidad normal) | Ajustar a 3015 Hz (presionar el interruptor PLAY) |
| | Sección de 3kHz del STD-301 (platina II) | VR254 (velocidad doble) | Ajustar a 6030 Hz (cortocircuitar TP28 y TP29 después de la reproducción). |
| | | VR252 (velocidad normal) | Ajustar a 3015 Hz (presionar el interruptor PLAY) |
| 2. Ajuste del recorrido de la cinta | | | |
| Modo | Puntos de ajuste | | Especificaciones |
| FWD | Tornillo de ajuste de azimuth de FWD | | Reproducción de 10kHz, -20dB con cinta de prueba STD-331. Ajustar a máxima salida de señal en los puntos de prueba TP501 y TP502. |
| REV | Tornillo de ajuste de azimuth de REV | | |
| Insertar el cassette y levantar la base de cabeza con el dedo de modo que la cinta toque la quí de cinta. | | | |
| STOP | Tornillos de ajuste de altura (izquierdo y derecho) | | Verificar visualmente si la cinta está sobre la guía de cinta. |
| FWD PLAY | Tornillo de ajuste de altura de FWD | | Ajustar la guía primaria de modo que en la cinta no se forme rizo. |
| REV PLAY | Tornillo de ajuste de altura de REV | | |

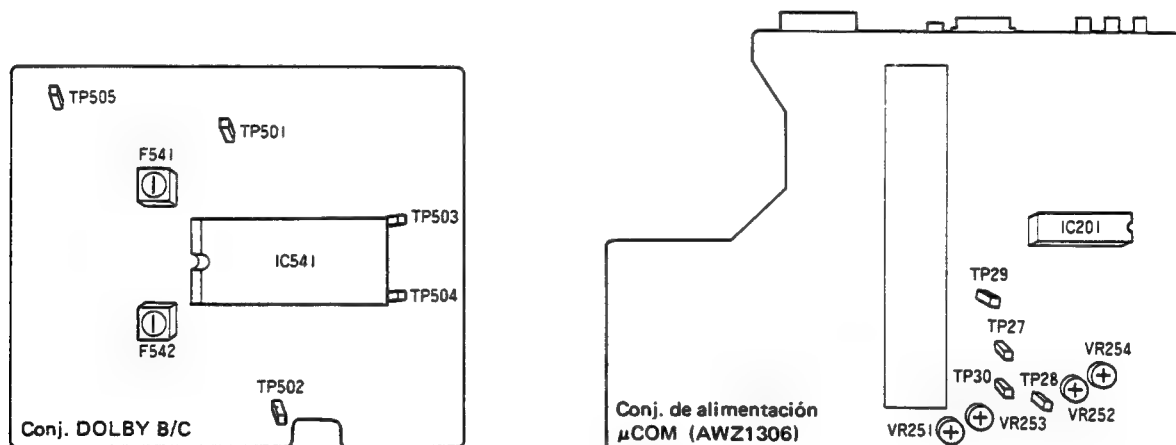


Fig. 7-1 Ajuste de velocidad de cinta

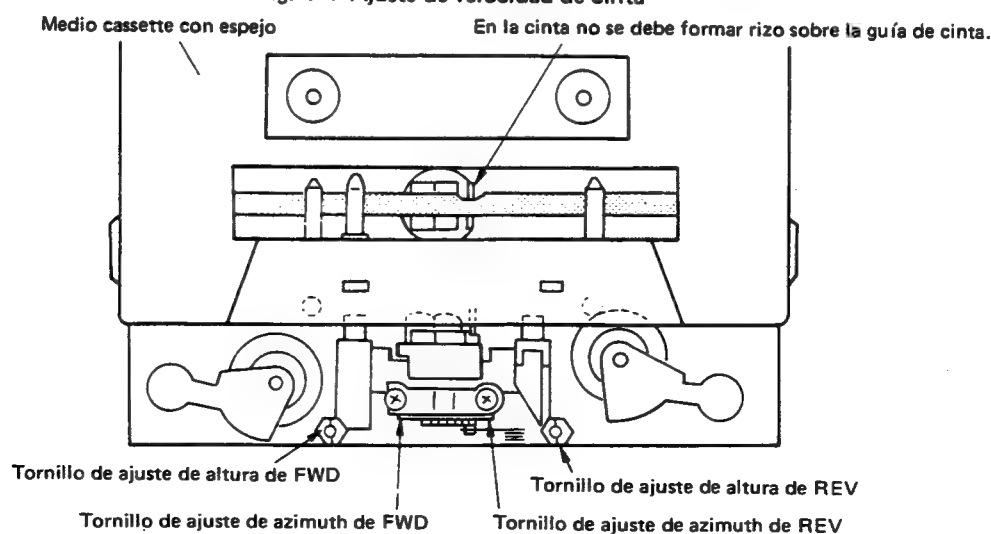


Fig. 7-2 Ajust del recorrido de la cinta

7.2 AJUSTE ELECTRICO

Condiciones de ajuste

1. El ajuste del mecanismo debe finalizarse primero.
2. Las cabezas debe estar limpias y desmagnetizadas.
3. El magnetófono debe envejecerse por al menos 2-3 minutos antes de comenzar el ajuste eléctrico.
4. Debe emplearse una señal de referencia de 0 dB, 1 Vrms.
5. La siguiente posición de conmutador no debe cambiarse, excepto cuando se indique lo contrario:
DOLBY NR: OFF

Cintas de prueba

STD-331B: Ajuste de reproducción (ver Fig. 7-3)

STD-608A: Cinta virgen normal

STD-620: Cinta virgen de CrO_2

STD-610: Cinta virgen de metal

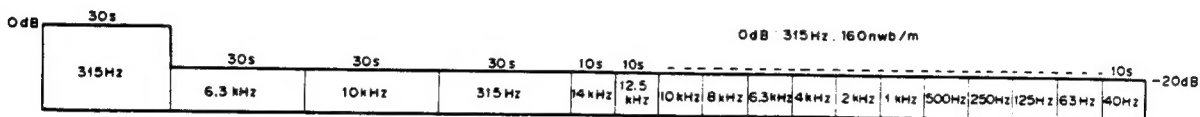


Fig. 7-3 Cinta de prueba STD-331B

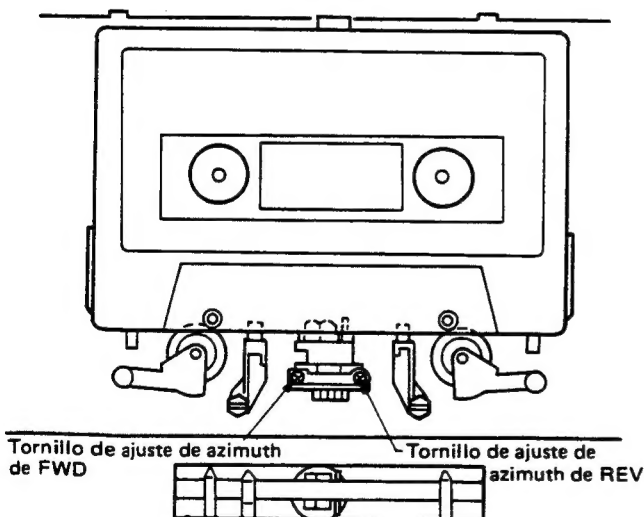


Fig. 7-4 Ajuste de azimuth de cabeza

Magnetófono I

1. Ajuste del ángulo de cabeza
2. Ajuste del nivel de reproducción
3. Ajuste de característica de frecuencia de grabación/reproducción
4. Ajuste de nivel de grabación

Magnetófono II

1. Ajuste del ángulo de cabeza
2. Ajuste del nivel de reproducción
3. Ajuste de característica de frecuencia de grabación/reproducción
4. Ajuste de nivel de grabación

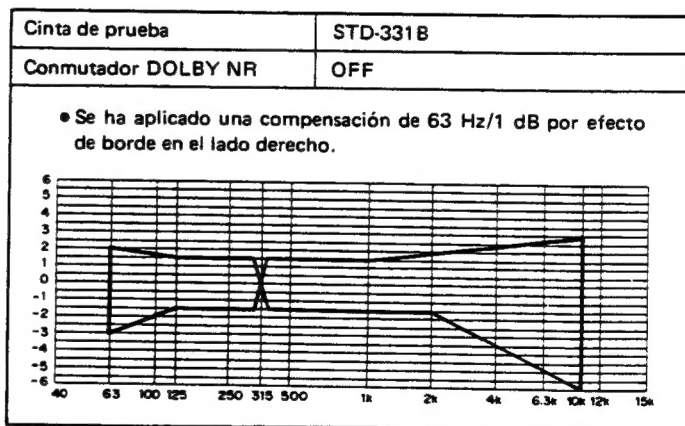


Fig. 7-5 Margen permisible de respuesta de reproducción

● **Ajuste de la platina I** • Esta unidad está equipada con selector automático de cinta.

1. Ajuste del ángulo de cabeza

- Girar VR301 y VR302 (RVs de ajuste de nivel de reproducción) completamente en sentido horario (posición MAX).

| Selector de cinta | Modo | Señal de entrada/cinta de prueba | Puntos de ajuste | Puntos de medición | Valor de ajuste | Comentarios |
|-------------------|------|--------------------------------------|--|-----------------------|---------------------------------------|---------------------------------------|
| NORM | PLAY | 10kHz, -20dB (reproducción)/STD-331B | Tornillo de ajuste del ángulo de cabeza (Fig. 7-4) | TP501 (L) TP502(R) | Máximo nivel de señal de reproducción | Fijar el tornillo después del ajuste. |

2. Ajuste del nivel de reproducción

- Este ajuste determina el nivel Dolby de reproducción, por lo que debe realizarse cuidadosamente.

| Selector de cinta | Modo | Señal de entrada/cinta de prueba | Puntos de ajuste | Puntos de medición | Valor de ajuste | Comentarios |
|-------------------|------|------------------------------------|-----------------------|-----------------------|------------------|-------------|
| NORM | PLAY | 315Hz, 0dB (reproducción)/STD-331B | VR301 (L) VR302(R) | TP501 (L) TP502(R) | -10,2dBV (309mV) | |

3. Ajuste de característica de frecuencia de grabación/reproducción

- Este ajuste determina la polarización de grabación, por lo que debe cuidarse evitar el deterioro del factor de distorsión debido a polarización insuficiente.

| Selector de cinta | Modo | Señal de entrada/ cinta de prueba | | Puntos de ajuste | Puntos de medición | Valor de ajuste | Comentarios |
|-------------------|----------|---|---|---------------------------|-----------------------|---|---|
| NORM | REC | Entrada de 315Hz la jack VIDEO. | 1 | Nivel de señal de entrada | TP501 (L) TP502(R) | -30,2dBV (31mV) | Colocar el RV de nivel de grabación en la posición central. |
| NORM | REC/PLAY | 315Hz (grabación) y 10kHz (reproducción)/ STD-608A | 2 | VR309 (L) VR310(R) | TP501 (L) TP502(R) | Grabar y reproducir repetidamente, efectuando correcciones hasta obtener nivel de reproducción de 10kHz igual a 0±0.5 dB de la señal de 315 Hz. | |

- Las curvas de respuesta de frecuencia mostradas en Fig. 7-7 deben cumplirse para cada combinación de cinta de prueba/posición del conmutador DOLBY NR.

4. Ajuste de nivel de grabación

| Selector de cinta | Modo | Señal de entrada/ Cinta de prueba | | Puntos de ajuste | Puntos de medición | Valor de ajuste | Comentarios |
|-------------------|----------|---|---|---------------------------|-----------------------|---|-------------|
| NORM | REC | Entrada de 315Hz al jack VIDEO. | 1 | Nivel de señal de entrada | TP501 (L) TP502(R) | -10,2dBV (309mV) | |
| NORM | REC/PLAY | 315Hz (grabación y reproducción)/ STD-608A | 2 | VR305 (L) VR306(R) | TP501 (L) TP502(R) | Grabar y reproducir repetidamente, efectuando correcciones hasta obtener un nivel de reproducción de -10,2 dBV (309mV) de la señal de 315 Hz. | |
| METAL | REC/PLAY | 315Hz (grabación y reproducción)/STD-610 | 3 | | TP501 (L) TP502(R) | Confirmar que el nivel de reproducción de la señal de 315 Hz sea -10,2 dBV ±2 dB. | |

● **Ajuste de la platina II** • Esta unidad está equipada con selector automático de cinta.

1. Ajuste del ángulo de cabeza

- Girar VR303 y VR304 (RVs de ajuste de nivel de reproducción) completamente en sentido horario (posición MAX).

| Selector de cinta | Modo | Señal de entrada/cinta de prueba | Puntos de ajuste | Puntos de medición | Valor de medición | Comentarios |
|-------------------|------|--------------------------------------|--|-----------------------|---------------------------------------|---------------------------------------|
| NORM | PLAY | 10kHz, -20dB (reproducción)/STD-331B | Tornillo de ajuste del ángulo de cabeza (Fig. 7-4) | TP501 (L) TP502(R) | Máximo nivel de señal de reproducción | Fijar el tornillo después del ajuste. |

2. Ajuste del nivel de reproducción

- Este ajuste determina el nivel Dolby de reproducción, por lo que debe realizarse cuidadosamente.

| Selector de cinta | Modo | Señal de entrada/cinta de prueba | Puntos de ajuste | Puntos de medición | Valor de ajuste | Comentarios |
|-------------------|------|------------------------------------|-----------------------|-----------------------|------------------|-------------|
| NORM | PLAY | 315Hz, 0dB (reproducción)/STD-331B | VR303 (L) VR304(R) | TP501 (L) TP502(R) | -10,2dBV (309mV) | |

3. Ajuste de característica de frecuencia de grabación/reproducción

- Este ajuste determina la polarización de grabación, por lo que debe cuidarse evitar el deterioro del factor de distorsión debido a polarización insuficiente.

| Selector de cinta | Modo | Señal de entrada/cinta de prueba | | Puntos de ajuste | Puntos de medición | Valor de ajuste | Comentarios |
|-------------------|----------|---|---|---------------------------|-----------------------|---|---|
| NORM | REC | Entrada de 315Hz al jack VIDEO. | 1 | Nivel de señal de entrada | TP501 (L) TP502(R) | -30,2dBV (31mV) | Colocar el RV de nivel de grabación en la posición central. |
| NORM | REC/PLAY | 315Hz (grabación) y 10kHz (reproducción)/STD-608A | 2 | VR311 (L) VR312(R) | TP501 (L) TP502(R) | Grabar y reproducir repetidamente, efectuando correcciones hasta obtener un nivel de reproducción de 10 kHz igual a 0±0,5 dB de la señal de 315 Hz. | |

- Las curvas de respuesta de frecuencia mostradas en Fig. 7-7 deben cumplirse para cada combinación de cinta de prueba/posición del conmutador DOLBY NR.

4. Ajuste de nivel de grabación

| Selector de cinta | Modo | Señal de entrada/ Cinta de prueba | | Puntos de ajuste | Puntos de medición | Valor de ajuste | Comentarios |
|-------------------|----------|---|---|---------------------------|-----------------------|---|-------------|
| NORM | REC | Entrada de 315Hz al jack VIDEO. | 1 | Nivel de señal de entrada | TP501 (L) TP502(R) | -10,2dBV (309mV) | |
| NORM | REC/PLAY | 315Hz (grabación y reproducción)/ STD-608A | 2 | VR307 (L) VR308(R) | TP501 (L) TP502(R) | Grabar y reproducir repetidamente, efectuando correcciones hasta obtener un nivel de reproducción de -10,2 dBV (309mV) de la señal de 315 Hz. | |
| METAL | REC/PLAY | 315Hz (grabación y reproducción)/STD-610 | 3 | | TP501 (L) TP502(R) | Confirmar que el nivel de reproducción de la señal de 315 Hz sea -10,2 dBV ± 2 dB. | |

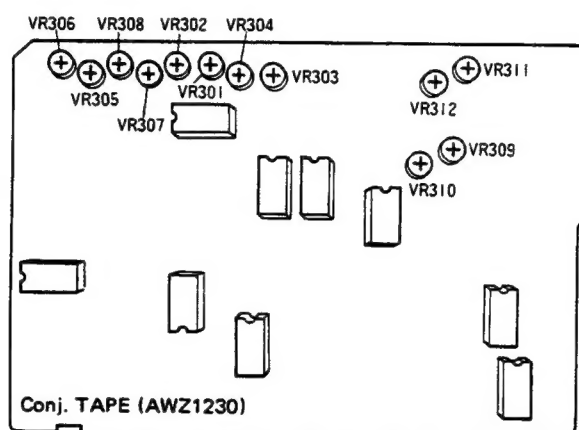


Fig. 7-6 Ajuste de las platinas I y II

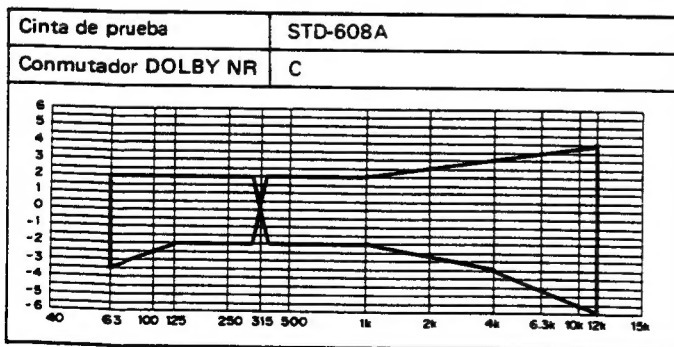
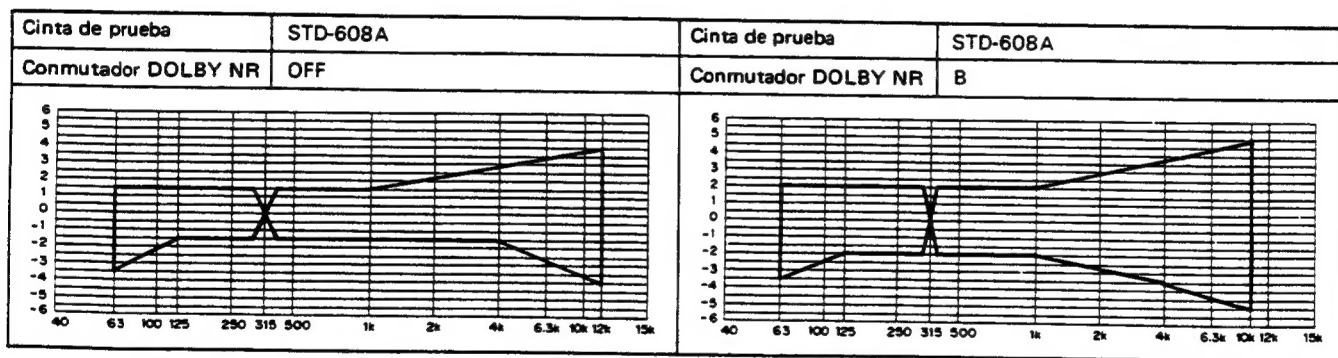


Fig. 7-7-1 Margenes permisibles de respuesta de frecuencia de grabación/reproducción (NORM)

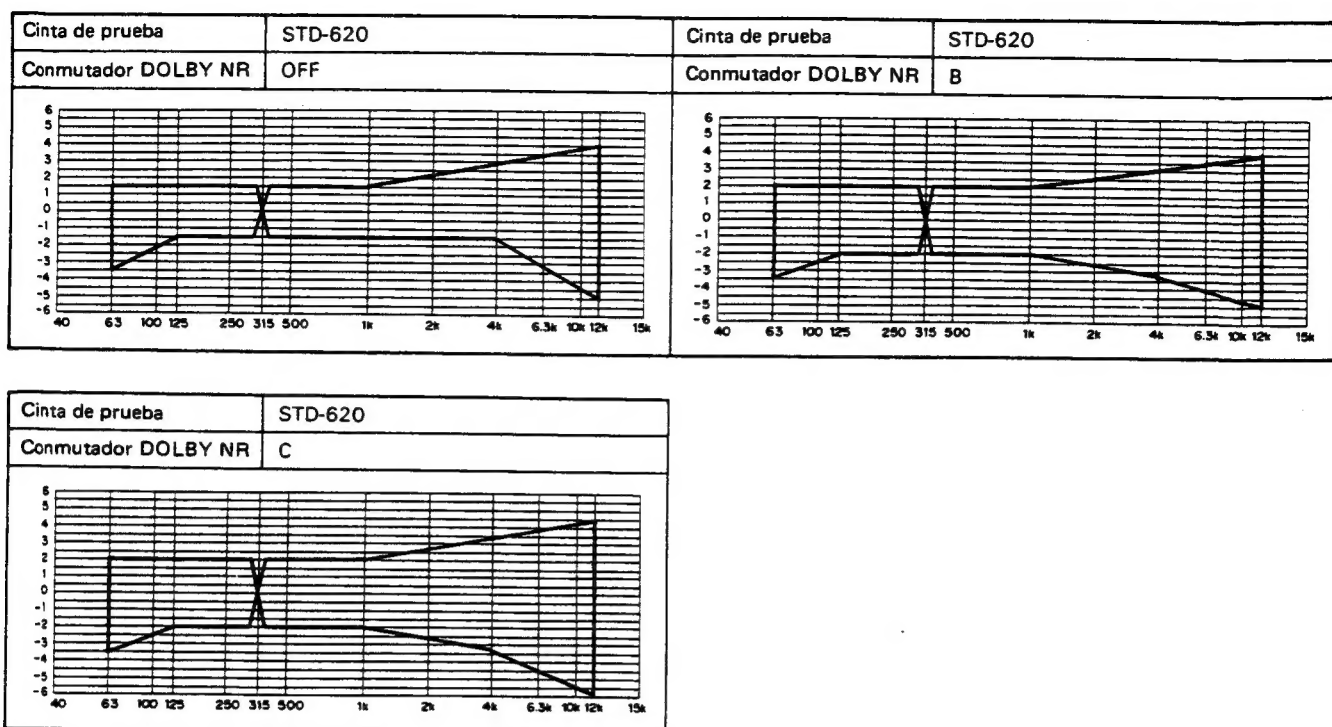


Fig. 7-7-2 Margenes permisibles de respuesta de frecuencia de grabación/reproducción (CrO₂)

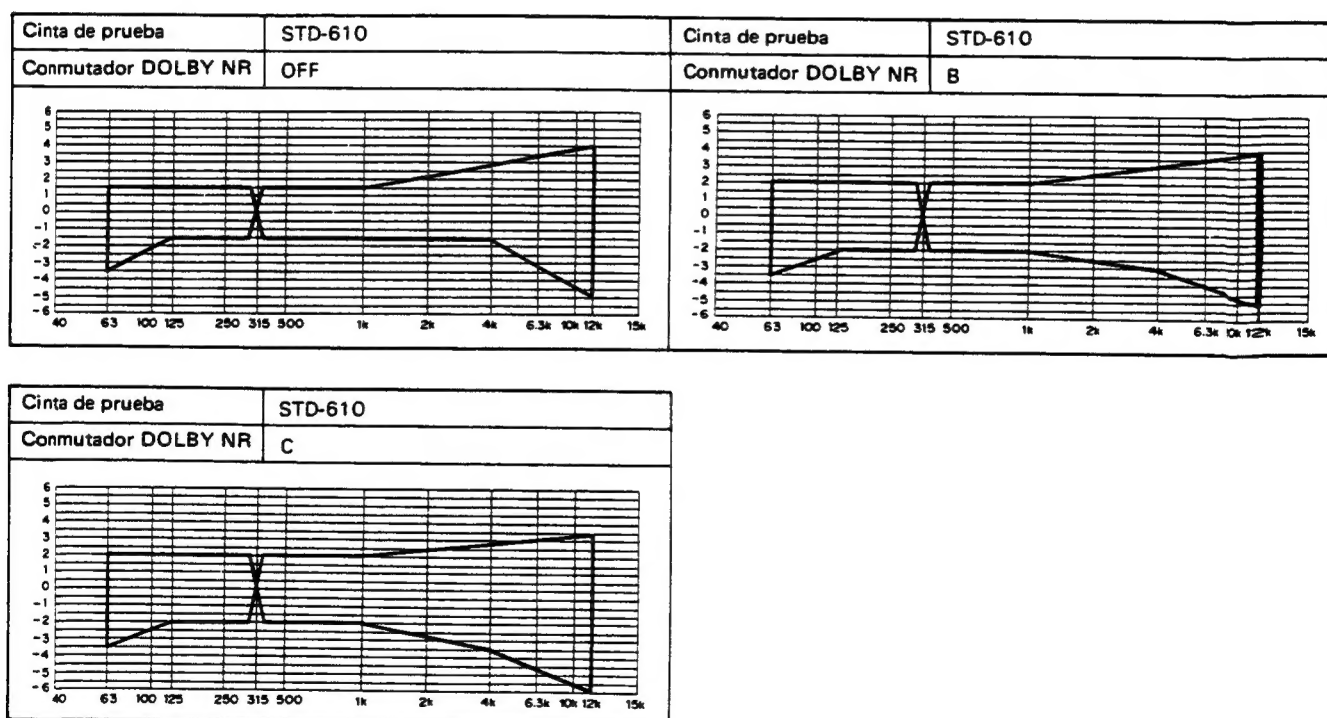


Fig. 7-7-3 Margenes permisibles de respuesta de frecuencia de grabación/reproducción (METAL)